

March 20, 2025

Richard Sparks, P.E.

Richard.sparks@usda.gov

Forest Service – Columbia River Gorge NSA
902 Wasco Ave., Suite 200
Hood River, OR 97031

**Re: Residual Maintenance ([PR#38-2023](#))
USFS Wyeth Campground (PWS ID# 41-[94014](#))
Final Approval**

Dear Mr. Sparks:

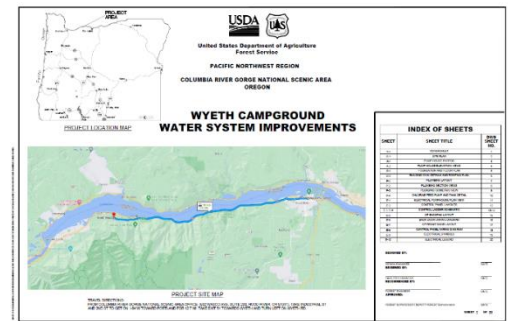
On February 25, 2025 I received an email from Benjamin Moeller requesting Final Approval for residual maintenance for the [USFS Wyeth Campground \(94014\)](#). The email included as-builts, operating procedures, post-construction photos, and a completed Project Final Approval Request form needed to verify that the project was completed in accordance with conditions in my Conditional Approval letter dated March 30, 2023, completing our plan review process. The residual disinfection system is granted **Final Approval** and may be placed into use.

The original submittal received March 29, 2023 included plans and specifications for the project and a plan review fee of \$248. A Conditional Approval letter dated March 30, 2023 was issued for the project, assigned plan review #38-2023. The project consisted of expanding the existing pumphouse to accommodate a chlorination system capable of providing a free chlorine disinfectant residual. Residual maintenance was required under a [Bilateral Compliance Agreement \(BCA\)](#) due to persistent total coliform positive test results in the well (SRC-BA) and the distribution system.

Please keep in mind:

1. The chlorine solution tank is not certified to ANSI/NSF Standard 61 (NSF-61) as indicated by the specification sheet provided by Furrow Pump. After having contacted Furrow Pump and the tank manufacturer (Ronco Plastics, Inc.), I found out that although these tanks are not certified to NSF-61, they are manufactured by Ronco Plastics using NSF-61 Microthene MP643962 resin (polyethylene). Since the tank is already installed and would provide incidental contact in relation to the rest of the water system, the tank may remain in use. Enclosed is some of the correspondence and documentation regarding the chlorine solution tank for your records.

Letter sent via email only



2. The free chlorine residual must be detectable throughout the distribution system and cannot exceed 4.0 mg/l. A slightly higher dose may be needed due to naturally occurring ammonia at 1.3 mg/l. The following free chlorine residual targets seem reasonable.
 - Free Chlorine Residual Target at entry point: 0.60 – 0.80 ppm
 - Free Chlorine Residual Target at far end of the distribution system: 0.20 – 0.80 ppm (ideally 0.50 ppm)
3. The DPD test kit (LaMotte DC1500 Colorimeter) will be needed to measure free chlorine residual at least twice a week in the distribution system, which should be incorporated into standard operating procedures.
4. The chlorine residual will need to be measured any time coliform samples are taken. The measured residual should be written on the lab reporting form.
5. An annual source assessment sample will need to be taken from the wellhead, prior to treatment. This sample should be marked as having been taken from the well (SRC-BA), representative of untreated water, and marked as an “Assessment” sample on the lab reporting form.

The remainder of this letter includes a project description. If you have any questions, please feel free to email me at evan.e.hofeld@oha.oregon.gov or call me at 971-200-0288. Thank you for your cooperation in completing this plan review process – your efforts are greatly appreciated!

Sincerely,



Evan Hofeld, PE
Regional Engineer
OHA - Drinking Water Services

cc: Donna Mickley, Forest Supervisor, donna.mickley@usda.gov
USDA USFS - Columbia River Gorge National Scenic Area
Ben Moeller, Project Engineer, Benjamin.Moeller@usda.gov
USDA USFS – Mt Hood National Forest
Andrew Howard, Maintenance Mechanic, andrew.howard@usda.gov
USDA USFS – Columbia River Gorge National Scenic Area
Ian Stromquist, REHS, ian.stromquist@hoodrivercounty.gov
Environmental Health Response Coordinator - Hood River County Public Health
Josh Seerup, Drinking Water Specialist, Josh.Seerup@oha.oregon.gov
Oregon Health Authority - Drinking Water Services

Encl: Project Description

Project Description

The original submittal received March 29, 2023 included plans and specifications for the project and a plan review fee of \$248. A Conditional Approval letter dated March 30, 2023 was issued for the project, assigned plan review #38-2023. Final Approval was granted March 20, 2025.

The project consisted of expanding the existing pumphouse to accommodate a chlorination system to provide a disinfectant residual (SDWIS Treatment Code X421). This disinfectant residual maintenance system is to provide a free chlorine residual throughout the distribution system as required under a [Bilateral Compliance Agreement \(BCA\)](#) due to persistent total coliform positive results in the distribution system and in the well (SRC-BA – Well [L97094](#)).

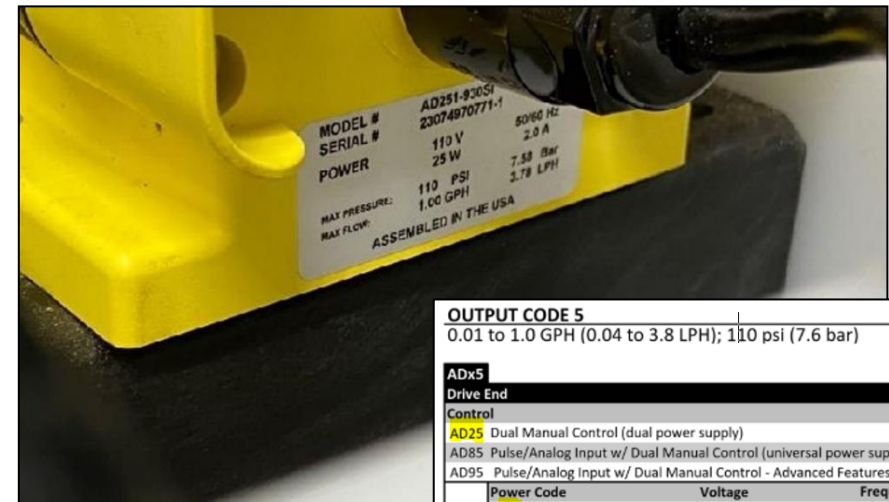
The treatment system included expanding the existing well house to accommodate:

- One Ronco Plastics, Inc. polyethylene chlorine solution tank (manufactured using NSF-61 Microthene MP643962 resin),
- One Roytronic Excel™ Series AD electronic metering pump (model #AD251-930SI)
- HASA Multi-Chlor 12.5% liquid sodium hypochlorite, and
- A low chlorine tank level alarm, LaMotte DC1500 colorimeter, and other controls and appurtenances to maintain the following free chlorine residual targets:
 - Free Chlorine Residual Target at entry point: 0.60 – 0.80 ppm
 - Free Chlorine Residual Target at far end of the distribution system: 0.20 – 0.80 ppm (ideally 0.50 ppm)

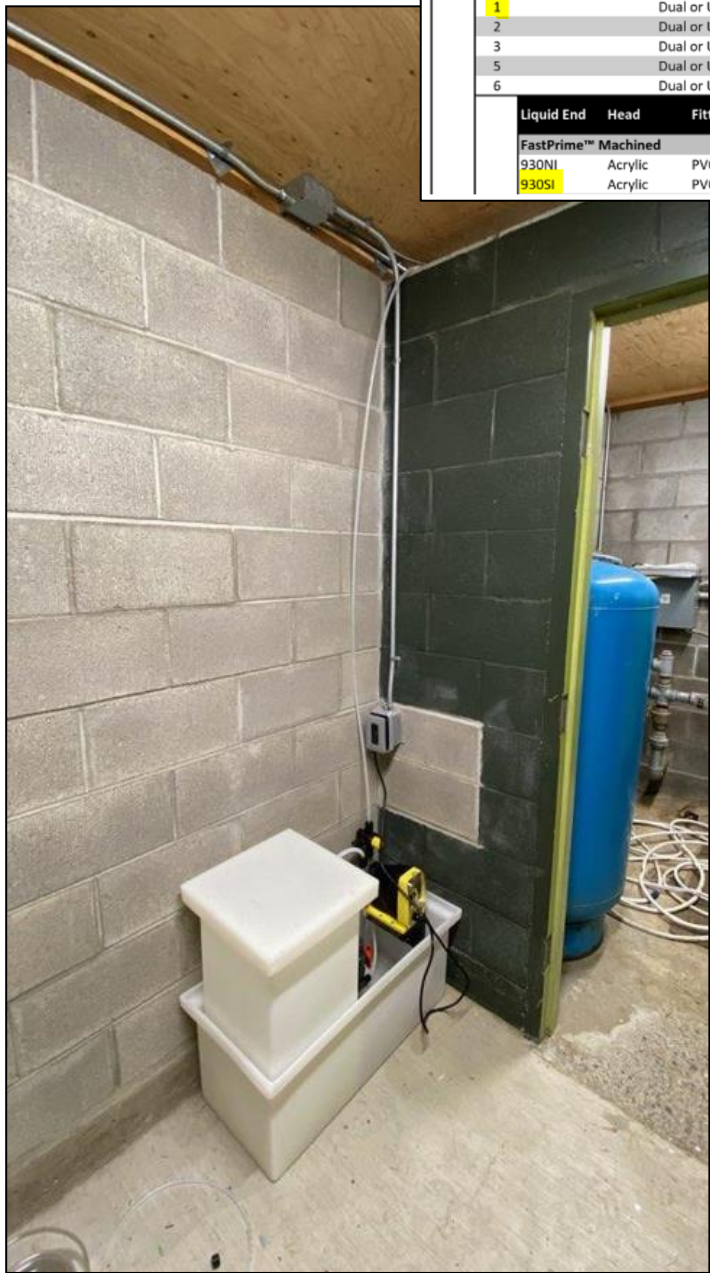
Note: A slightly higher dose may be needed due to naturally occurring ammonia in the well measured at 1.3 mg/l.

The new system utilizes a pre-existing 119-gallon Challenger Model #366 pressure tank.






OUTPUT CODE 5				120 SPM Max.	Size Code 3		
0.01 to 1.0 GPH (0.04 to 3.8 LPH); 110 psi (7.6 bar)				Autoprime™ 0.008 to 0.8 GPH (0.03 to 3.0 LPH)			
ADx5							
Drive End							
Control							
AD25 Dual Manual Control (dual power supply)							
AD85 Pulse/Analog Input w/ Dual Manual Control (universal power supply)							
AD95 Pulse/Analog Input w/ Dual Manual Control - Advanced Features (universal power supply)							
Power Code	Voltage	Frequency	Plug				
1	Dual or Universal	50-60 HZ	110 - 120V US Plug				
2	Dual or Universal	50-60 HZ	220 - 240V US Plug				
3	Dual or Universal	50-60 HZ	220 - 240V DIN Plug				
5	Dual or Universal	50-60 HZ	220 - 240V UK Plug				
6	Dual or Universal	50-60 HZ	220 - 240V Aust/NZ Plug				
Liquid End	Head	Fittings	Balls	Valve	Connections	Seat / O-Ring	RPM Kit
FastPrime™ Machined							
930NI	Acrylic	PVC	Ceramic	-	PE ¾" O.D.	PTFE/Polyprel®	RPM-832
930SI	Acrylic	PVC	Ceramic	FV	PE ¾" O.D.	PTFE/Polyprel®	RPM-832



March 20, 2025

CFS-15-1-25-GF Data Sheet 010914.pdf



FURROW PUMP

Supporting the chemical equipment solutions industry through education and expertise.

8525 SW St. Helens Drive
Wilsonville, OR 97070
503-682-4411 • 503-682-4421 fax
sales@furrowpump.com

CHEMICAL FEED STATION

- Compact Foot Print
- Great for Supplemental Feed or Secondary Disinfection Stations
- Redundant/Dual Feed Available
- NSF Approved

INCLUDES

- Day Tank with Lid
- Isolation Valves
- Spill Containment
- Semi Flooded Suction
- Calibration Column
- Pump Mount Bracket
- Degassing and Prime Return Plumbed to Tank

SPECIFICATIONS

CFSM 15*
Single Pump Feed Station
Foot Print Dimensions: 15" x 33" x 26"H
Volume: Tank: 14 Gallons, Spill: 16 Gallons
Material: Polyethylene, Tank: 1/8" Wall, Spill: 1/2" Wall


CFSS 50
Single Pump Feed Station
Foot Print Dimensions: 28" x 52" x 42"H
Volume: Tank: 50 Gallons, Spill: 53 Gallons
Material: Polyethylene, Spill: 5/16" Wall


CFSD 50
Dual Pump Feed Station
Foot Print Dimensions: 28" x 52" x 42"H
Volume: Tank: 50 Gallons, Spill: 53 Gallons
Material: Polyethylene, Spill: 5/16" Wall

*CFSM-15-1-25-GF
- 1 = AD or PD pump
- 25 = 0.25" Tubing connections
- GF = Georg Fischer Valves

Optional System Features

- Flow Meter
- Mag Meter, NSF 61-G & IP68
- Paddle Wheel
- Insertion Style
- Multi-jet, Lead Free NSF 61-G
- Drum Level Alarm
- Chemical Monitor / Alarm (+ Remote)
- Redundant Pump Set up
- Remote Monitor, Control and Data Collection





RE: Bilateral Compliance Agreement - Wyeth Campground (PWSID #94014) in H...



Sparks, Richard - FS, OR <Richard.Sparks@usda.gov>

To: Hofeld Evan E; Howard, Andrew - FS, OR;
Moeller, Benjamin - FS, OR
Cc: ian.stromquist@hoodrivercounty.gov; Seerup Josh;
Daker, Joshua - FS, OR; Seerup Josh

This sender Richard.Sparks@usda.gov is from outside your organization.
You forwarded this message on 3/3/2025 4:44 PM.

CFS-15-1-25-GF Data Sheet 010914.pdf 477 KB

Hi Evan,

Attached is the product data for the Furrow Pump CFSM15 single pump feed station tank and containment.

Thanks,



Richard Sparks, P.E.
Civil Engineer
Forest Service
Columbia River Gorge National
Scenic Area and Mt. Hood NF
p: 541-645-3805
richard.sparks@usda.gov

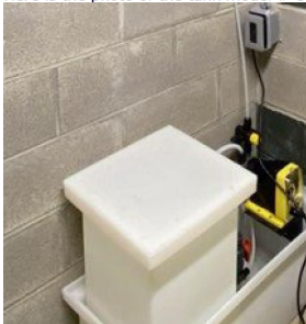
Hofeld Evan E

From: Hofeld Evan E
Sent: Monday, March 3, 2025 4:45 PM
To: info@roncoplastics.com
Subject: NSF-61 certification question on Ronco chemical solution tank
Attachments: [CFS-15-1-25-GF Data Sheet 010914.pdf](#)

Hi there,
I was provided the attached product spec sheet for a chemical feed tank that was installed for a public water system and was told by Furrow Pump that Ronco is the supplier of these tanks.

Do you have documentation demonstrating they are currently certified to ANSI/NSF Standard 61?

NSF, Underwriters Laboratories (UL), and Water Quality Alliance (WQA) all can certify products to NSF-61, but these tanks do not have any marking on them to show this. Here is the photo of the tank model # CFSM 15 that was installed.



Thanks.

Evan Hofeld
Regional Engineer
OREGON HEALTH AUTHORITY - Public Health Division - Drinking Water Services
evan.e.hofeld@oha.oregon.gov
Cell: 971-200-0288
Fax: 971-673-0458
www.health.oregon.gov/dwp

Hofeld Evan E

From: Alondra Barajas <alondrab@ronco-plastics.com>
Sent: Tuesday, March 11, 2025 12:04 PM
To: Hofeld Evan E; Info
Subject: RE: NSF-61 certification question on Ronco chemical solution tank
Attachments: Technical Data Sheet MP 643962.pdf; MP 643962 FDA Letter Product Stewardship Bulletin.pdf; MP 643962 NSF.pdf

You don't often get email from alondrab@ronco-plastics.com. [Learn why this is important.](#)


Think twice before clicking on links or opening attachments. This email came from outside our organization and might not be safe. If you are not expecting an attachment, contact the sender before opening it.

That is correct these don't have the marking but attached is the documents for the resin used. I'll pass it along since they are our customer.

Thank you,

Alondra Barajas
Director of Administration
Ronco Plastics, Inc.
15022 Parkway Loop, Suite B
Tustin, CA 92780
714-259-1385 (Phone) | 714-259-0759 (Fax)
866-355-5950 toll-free
Web: <http://www.ronco-plastics.com/>

NSF-61 listing Microthene MP643962 resin



The Public Health and Safety Organization

NSF Product and Service Listings


These NSF Official Listings are current as of **Wednesday, March 11, 2020** at 12:15 a.m. Eastern Time. Please [contact NSF](#) to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:
<http://info.nsf.org/Certified/PwsComponents/Listings.asp?Company=58770&Standard=061&>

NSF/ANSI/CAN 61 Drinking Water System Components - Health Effects

NOTE: Unless otherwise indicated for Materials, Certification is only for the Water Contact Material shown in the Listing. Click here for a list of [Abbreviations used in these Listings](#). Click here for the definitions of [Water Contact Temperatures denoted in these Listings](#).

Equistar Chemicals, LP
One Houston Center
1221 McKinney Street
Suite 700
Houston, TX 77010
United States
713-309-7995
[Visit this company's website \(http://www.lyb.com\)](http://www.lyb.com)



The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, March 11, 2020** at 12:15 a.m. Eastern Time. Please [contact NSF](#) to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:
<http://info.nsf.org/Certified/PwsComponents/Listings.asp?Company=58770&Standard=061&>

NSF/ANSI/CAN 61 Drinking Water System Components - Health Effects

NOTE: Unless otherwise indicated for Materials, Certification is only for the Water Contact Material shown in the Listing. Click here for a list of [Abbreviations used in these Listings](#). Click here for the definitions of [Water Contact Temperatures denoted in these Listings](#).

Equistar Chemicals, LP
One Houston Center
1221 McKinney Street
Suite 700
Houston, TX 77010
United States
713-309-7995
[Visit this company's website \(http://www.lyb.com\)](http://www.lyb.com)

Facility: 110m11, IL

Protective (Barrier) Materials

Trade Designation	Water Contact Blue Restriction	Water Contact Temp	Water Contact Material
Yach Material*			
Petrothene GA62962	>= 5 gal.	C. HOT	PE
Microthene MP62962	>= 5 gal.	C. HOT	PE
Petrothene GA635962	>= 5 gal.	C. HOT	PE
Microthene MP635962	>= 5 gal.	C. HOT	PE
Petrothene GA643962	>= 5 gal.	C. HOT	PE
Microthene MP643962	>= 5 gal.	C. HOT	PE

* All Listed products from this facility are NSF Certified, whether or not they bear the NSF Mark.

February 17, 2020
Alondra Barajas
Ronco Plastics, Inc.
15022 Parkway Loop Ste. B
Tustin, CA 92780



Microthene MP643962
A product of Equistar Chemicals, LP

Dear Alondra Barajas:

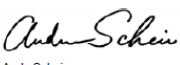
The following is in response to your request for Product Stewardship Information (PSInfo) for the product listed above. The attached Product Stewardship Bulletin (PSB) details the regulatory status of this product.

LyondellBasell Industries responds to product stewardship requests with a standardized Product Stewardship Bulletin (PSB) which summarizes the global regulatory status of a product. LyondellBasell Industries will not complete customers' forms or questionnaires. Standardized responses provide each customer with consistent information in a timely fashion. Each request is reviewed to ensure our response documents provide relevant information.

Please note that compliance with these regulations should not be interpreted to guarantee that the product, will, in fact, perform in a particular application. Your Technical Service Representative can help you determine that the characteristics of the product are compatible with the desired conditions of use.

Should you have any further questions concerning a LyondellBasell product, or if we can assist in any other way, please do not hesitate to contact us.

Best regards,


Andy Scheie
Manager, Product Stewardship US/CAN
Polyolefins and APS
513-530-4229
andrew.scheie@lyondellbasell.com

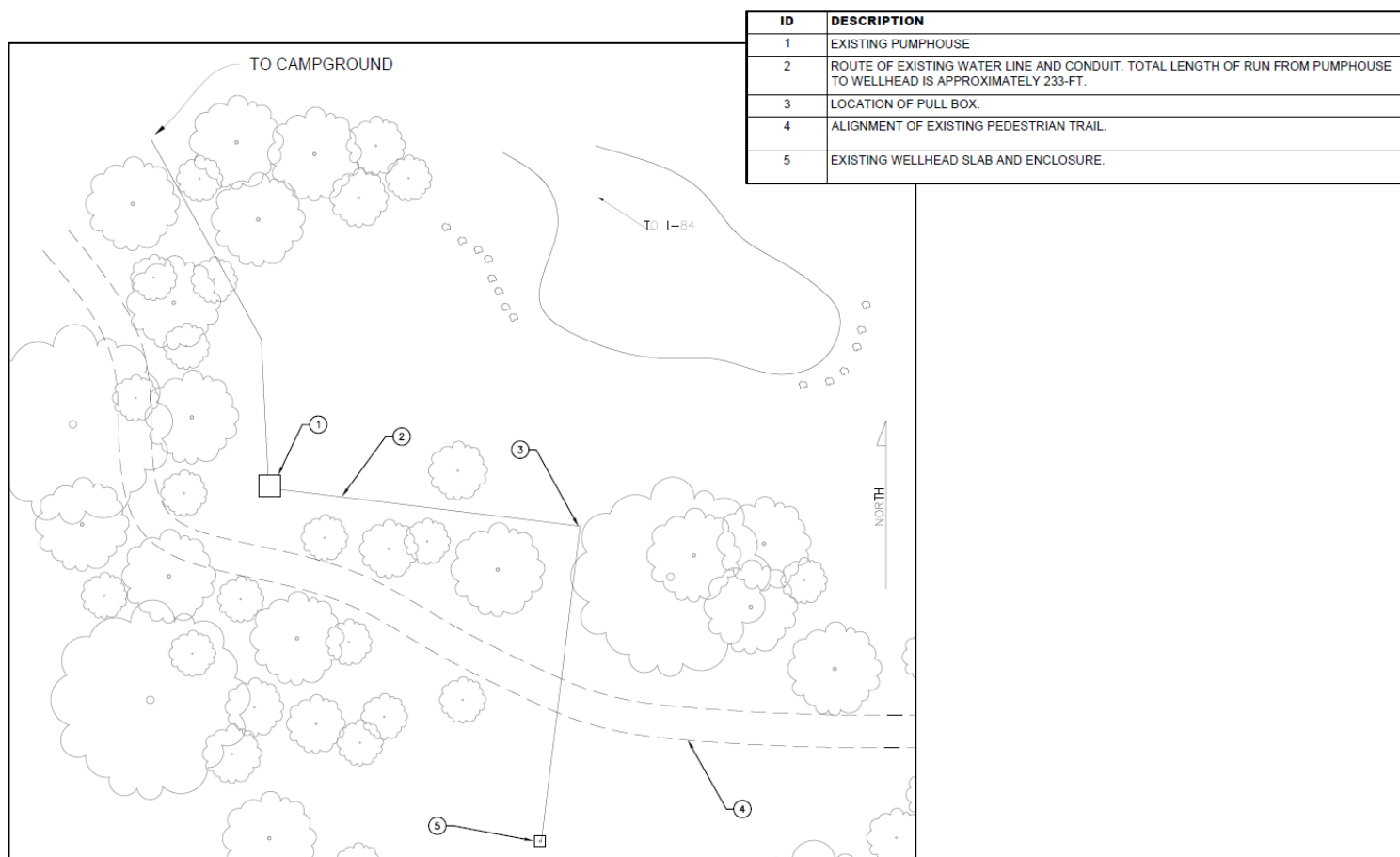
LyondellBasell
Product Stewardship Information
Date: 2/17/2020

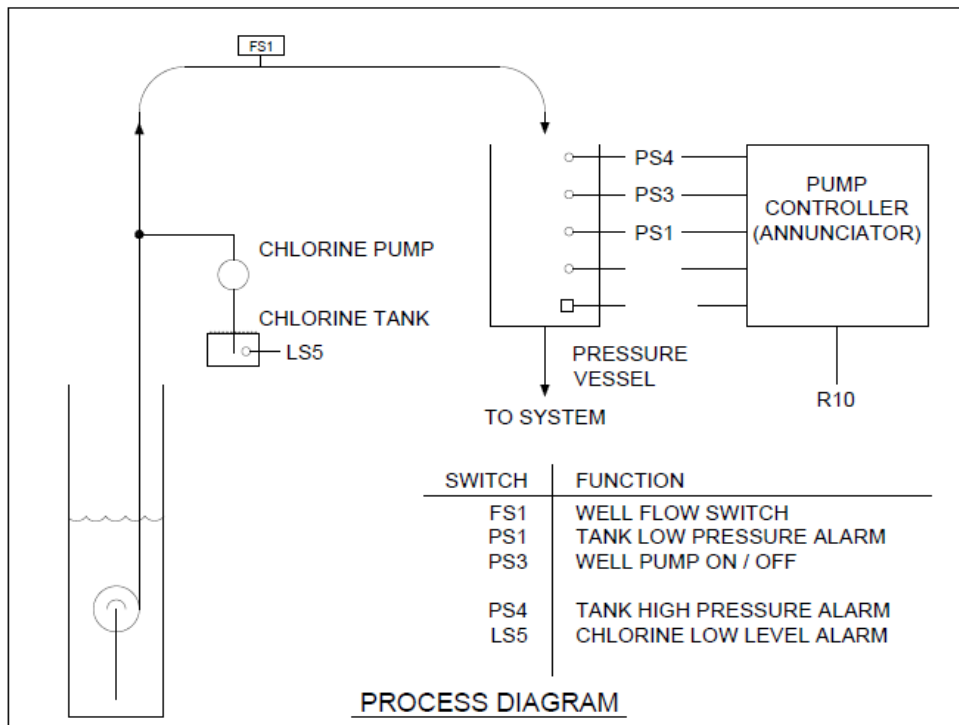
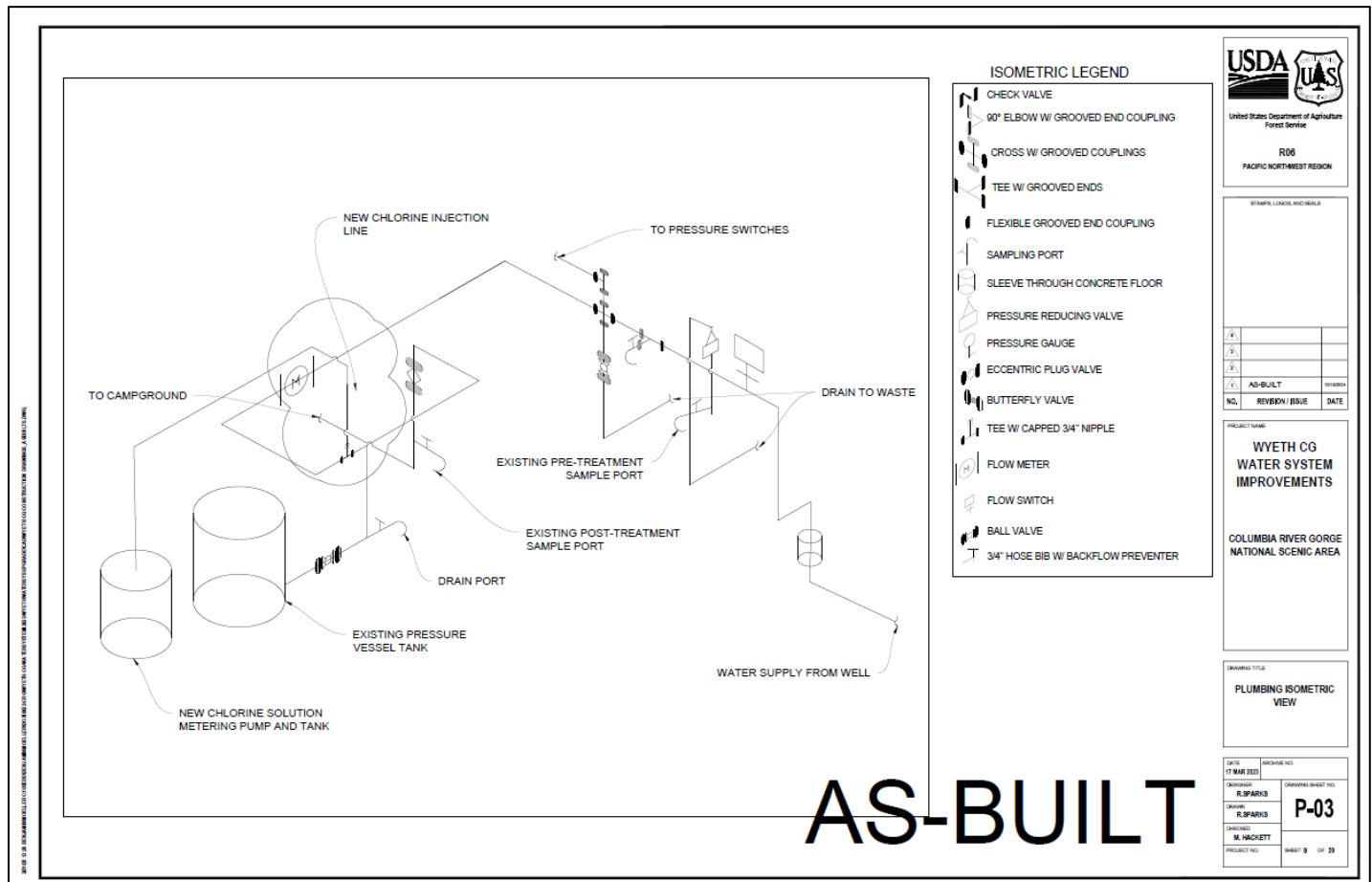
Page 1 of 9

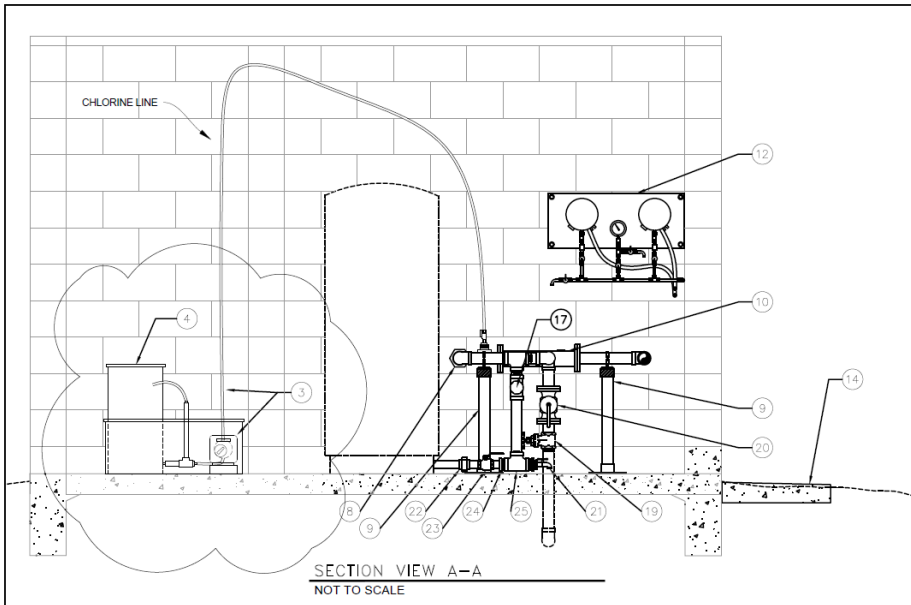
Microthene MP643962
Recipient Tracking #: 2274059

Microthene MP652962	>= 5 gal.	C. HOT	PE
Petrothene GA625962	>= 5 gal.	C. HOT	PE
Microthene MP625962	>= 5 gal.	C. HOT	PE
Petrothene GA635962	>= 5 gal.	C. HOT	PE
Microthene MP635962	>= 5 gal.	C. HOT	PE
Petrothene GA643962	>= 5 gal.	C. HOT	PE
Microthene MP643962	>= 5 gal.	C. HOT	PE

* All Listed products from this facility are NSF Certified, whether or not they bear the NSF Mark.

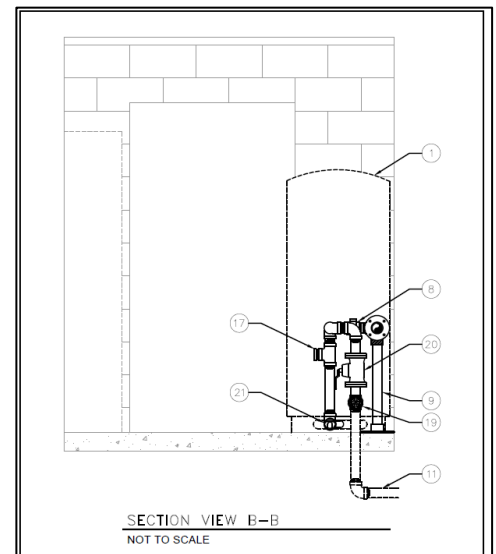
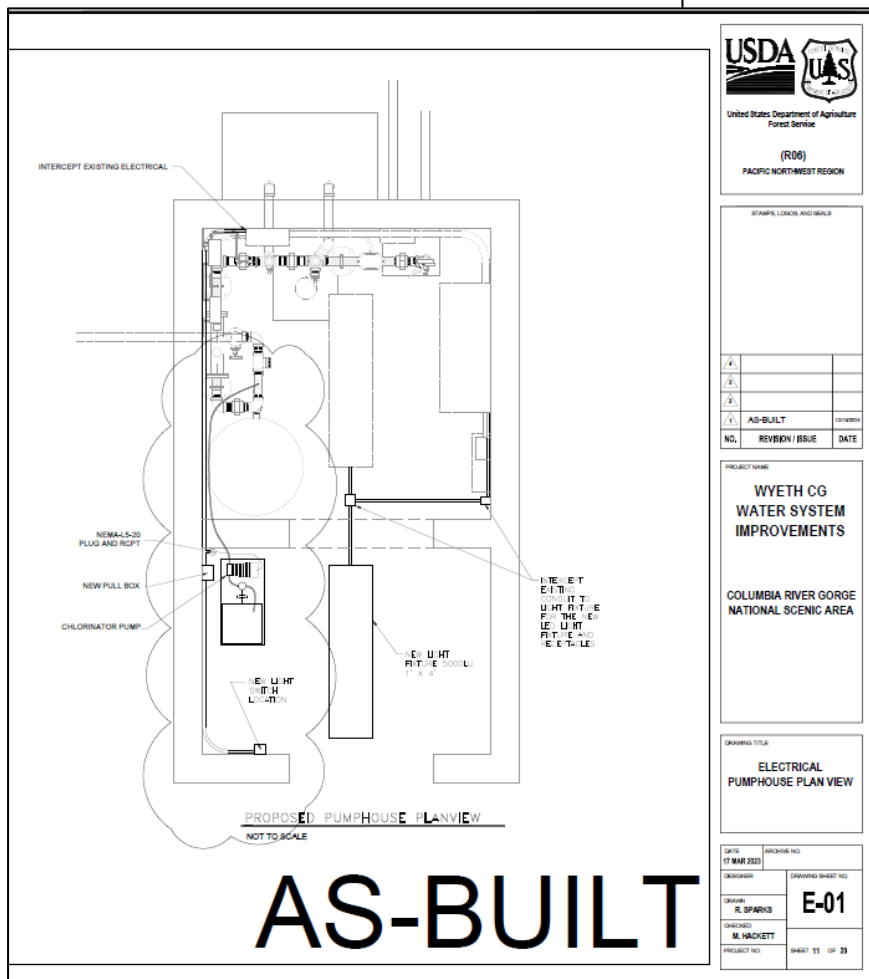
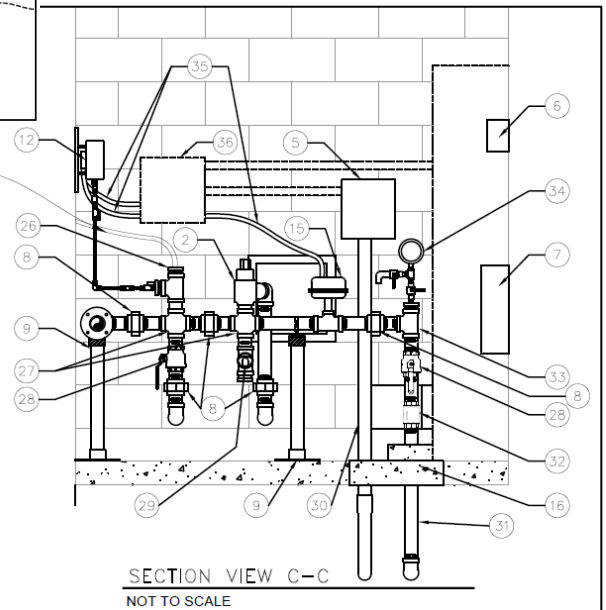







1	EXISTING PRESSURE TANK.
2	EXISTING PRESSURE RELIEF TO WASTE
3	NEW CHLORINE SOLUTION METERING PUMP "LMI ROYTRONIC EXCEL SERIES AD ELECTRONIC METERING PUMP" AND HOSE TO INJECTOR SEE CALL-OUT NO. 26
4	NEW SOLUTION TANK
5	EXISTING NEMA 1 JUNCTION BOX AND BOLTED TERMINAL BLOCK.
6	EXISTING PUMP PROTECTION DEVICE
7	EXISTING 4KW, 240V WALL MOUNT HEATER.
8	EXISTING 2" THD. UNION
9	EXISTING STEEL PIPE SUPPORT
10	EXISTING 2" FL. X FL. FLOW METER W/ STRAINER, TOTALIZATION REGISTER AND REAL TIME FLOW RATE INDICATOR (GPM)
11	EXISTING 2" GALVANIZED STEEL PIPE (GSP) TO CAMPGROUND.
12	EXISTING PRESSURE SWITCHES.
13	EXISTING 2" GSP 45 DEG. ELBOW W/ SCREENED OUTLET FOR PUMP TO WASTE AND PRESSURE RELIEF.
14	NOT USED
15	EXISTING 2"X2"X1-1/4" THD CLOSE COUPLED TEE W/ NEMA 4X-SS NC FLOW SWITCH.
16	NOT USED
17	EXISTING 2"X2" THD. TEE W/ MALE PLUG. CAN BE USED FOR WATER SAMPLE PORT.
18	EXISTING ABANDONED WELL HEAD.

FIELD LOCATE ROUTING
OF CHLORINE LINE WITH COR





Drinking Water Services Project Final Approval Request Form

[Print](#)

Project Name Residual Maintenance Wyeth Campground

Public Water System ID# 41- 94,014

PWS Name USFS Wyeth Campground

PR# 38-2023

Click to locate PWS ID#

	YES	NO	DATE
1. Was the project undertaken? If so, what was the starting date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>08/28/2023</u>
2. If project was not undertaken, has the project been abandoned?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Was the project completed? If so, when?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>09/30/2024</u>
If project not complete, estimated completion date: 			
4. If completed, was the work accomplished in conformance with all conditions listed in the Conditional Approval letter and DWS Construction Standards, Oregon Administrative Rule (OAR) 61-0050? In the comments below or on a separate sheet please make clear how all conditions specified in the Conditional Approval letter were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. If the project was completed, were there any differences between what is shown on the plans and what was actually installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. If the completed project is different from what is shown on the plans, were the plans modified to show as-built conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Have as-builts been sent to Drinking Water Services? NOTE: As-builts are not required if there were no significant changes noted in 5.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Are the facilities operating? If so, starting when?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>May 2025</u>

Signature of Engineer JENNIFER LYMAN

Name Jennifer Lyman

Firm USFS CRGNSA Forest Engineer

Comments

Date 02/21/2025

OR PE#

Digitally signed by JENNIFER LYMAN
Date: 2025.02.21 15:27:36 -0800

Hofeld Evan E

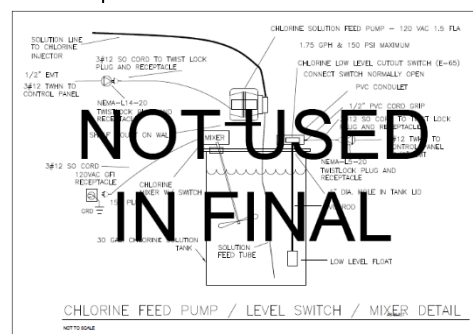
From: Moeller, Benjamin
Sent: Tuesday, February 19, 2025
To: Hofeld Evan E
Cc: Sparks, Richard -
Subject: Bilateral Compliance
Attachments: IMG_20250219_1120250219_16104
Construction Drawings
Chlorination System

You don't often get email from benjamin.moeller@usda.gov

Think twice before clicking on links or opening attachments and might not be safe. If you are not expecting this email, please do not click on links or open attachments.

Revised date 10/2021

Hi Evan,



From: Howard, Andrew - FS, OR <andrew.howard@usda.gov>
Sent: Thursday, February 27, 2025 8:47 AM
To: Hofeld Evan E <EVAN.E.HOFELD@oha.oregon.gov>; Moeller, Benjamin - FS, OR <Benjamin.Moeller@usda.gov>
Cc: Sparks, Richard - FS, OR <Richard.Sparks@usda.gov>; Ian.stromquist@hoodrivercounty.gov; Seerup Josh <josh.seerup@oha.oregon.gov>; Daker, Joshua - FS, OR <joshua.daker@usda.gov>
Subject: RE: Bilateral Compliance Agreement - Wyeth Camperound (PWSID #94014) in Hood River County

Even

1. I attached the Wyeth Specials I took in July 2024 after the chlorine pump was installed. 3 samples in the distribution system and 1 before treatment. The distribution samples came back clean, but the pretreatment sample came back with TC+ which was expected. The residual in the system for those tests was 0.47ppm
2. Yes, we use the HASA 12.5% multi-chlorine
3. The pressure tank is a Challenger #366. 119 gallons



Andrew Howard
Maintenance Mechanic
Forest Service
Columbia River Gorge National Scenic
Area
c: 503-278-0631
andrew.howard@usda.gov

Hofeld Evan E

From: Moeller, Benjamin - FS, OR - Benjamin.Moeller@usda.gov>
Sent: Tuesday, February 25, 2025 10:40 AM
To: Hofeld Evan E
Cc: Sparks, Richard - FS, OR; Howard, Andrew - FS, OR; ian.stromquist@hoodrivercounty.gov
Subject: Bilateral Compliance Agreement - Wyeth Campground (PWSID #94014) in Hood River County
Attachments: IMG_20250219.161032.jpg; IMG_20250219.161035.jpg; IMG_20250219.161039.jpg; IMG_20250219.161042.jpg; IMG_20250219.161044.jpg; IMG_20250219.162312.jpg; Wyeth CG Construction Drawings, ASBUILTS.pdf; Wyeth CG Project Completion SIGNED.pdf; O&M Chlorination System.pdf

You don't often get email from benjamin.moeller@usda.gov. [Learn why this is important](#)

Think twice before clicking on links or opening attachments. This email came from outside our organization and might not be safe. If you are not expecting an attachment, contact the sender before opening it.

Hi Evan,

I'm writing to submit final documentation regarding the chlorination system we've installed at Wyeth Campground in Hood River County.

I've attached the Final Approval Request form as well as pictures and as-builts.

Our full system O&M Manual is too large to send – but I've attached our starting/stopping procedures as well as our shocking procedures and sampling plan for the new chlorination system.

Make / Model of Chlorine Test Kit: Chlorine DC1500 Colorimeter Test Kit (LaMotte)

Free Chlorine Residual Target at entry point: 0.60 – 0.80 ppm

Free Chlorine Residual Target at far end of the distribution system: 0.20 – 0.80 ppm (ideally 0.50 ppm)