

**Not Enforcement, Reinforcement
Caution! You're about to enter a
No-Swim Zone! ☺**



New Wastewater Operators Newsletter

Volume 2, Issue 10, December 2011

Dear Ladies and Gentlemen:

Strength in Numbers: My email victims' list is now at 250, we gained 6 subscribers since November's issue. Actually, two of them were accidentally dropped off the list when my hard drive fried in June. Subscribers include wastewater operators (municipal and industrial), public works directors, civil engineers, Ecology employees and other interested parties.

Why this newsletter?: The main purpose of this voluntary exercise is to showcase cool ideas (and the people responsible) I see or hear about in the wastewater treatment industry, mostly in Eastern Washington. I've also got both eyes open for surplused items around the state, which could be of use to other wastewater facilities.

Share with us: Everyone reading this is part of the wastewater community in some way. If you have an idea or interesting project you'd like to share, please email me about it. If you've solved a problem at your facility, there are likely 10 others puzzling over it at theirs.

Issue Summary:

Page 2: Equipment for sale or to give away: Pasco has surplused UV lights; Pateros has a floating aerator unit (needs work); Omak has a complete helical screening device.

Page 3: Job Openings: Simplot Moses Lake has a career position open.

Page 4-9: Cool Idea of the month—lagoon depth data loggers!

Page 9-10: Important Lab Accreditation Info

Page 11: WERF Fact Sheet available: "Energy Production and Efficiency Research"

Page 11: Facebook group: a new member and postings.

Page 11: WWTPO certification study session in Grandview scheduled—update

Page 11: Guidance manual for conducting an Industrial User Survey available

Page 12: Signature block: Includes a disclaimer.

Page 13: Parting shots

Equipment for sale or to give away:

I've been told that the [City of Pasco WWTP](#) has some UV disinfection units they've surplused. The number, brand and price if any will be up to the customer to find out. Direct phone line to the plant, according to Pasco's website is: (509) 544-3038. The Plant Division Manager is Reuel Klempel and the Chief Operator is Rod Tufford. One or both of these gentlemen should be available to give callers information about the surplused items.

Dale Parks, Public Works Superintendent for the [City of Pateros](#) told me they have to get rid of some scrap metal including a floating aerator usually found in aerated lagoons. They need to clear stuff out to make room for a city-owned RV park, if I recall. The phone number there is (509) 923-2403. Dale says the aerator "needs some work".

The [City of Omak WWTP](#) is currently undergoing a major upgrade to its headworks, digester, etc. Chief Operator Jesus Arciniega says their helical-style screening device was working fine when they took it off-line this month. It needs a new brush. I forgot the brand name, but I do know it was designed to handle about 1 MGD and looks to be about 20+ feet long. Included are the actuating float switch and control panel. Photos below. Jesus can direct you to the person in charge of determining the price they're going to ask for the device. Jesus' office phone: (509) 826-2383.



Job Openings:

Simplot Moses Lake has a full-time position open:

Jackie Keele wrote the following to me on December 14th:

“Hi Darrel,

This is what will go in our local newspaper this week and I think they’re putting it in Tri-Cities and Spokane’s as well. The pay bracket starts at about \$18/hr and goes up to a little over \$23 after completing a probationary period. The actual job description is being changed to reflect proficiency in Microsoft Office desired, removing some of the equipment no longer in use and that which has been added since 2007. As soon as that is approved (we made the final revisions today), I’ll send a copy to you in case anyone has questions for you...

[We need] someone with not only WW knowledge but the ability to write reports, create spreadsheets, and deal with the Process Water Attendants, Management (all the way to Boise) and the public... We’re a great place to work, the other Team Members are awesome, and it can be a dream job for the right person. We are Union – Teamsters Local 760, to be exact...”

The posting:



Food Group

Moses Lake, WA

Process Water Treatment Coordinator

The J. R. Simplot Company currently has a **Process Water Treatment Coordinator** opening at the Moses Lake, Washington facility. Candidates for this position should have prior process water treatment, and maintenance mechanical experience (food processing preferred). A formal technical education, good work ethic and excellent communications skills is desired. Overtime, shift & weekend work can be common in this position to support factory needs.

The J. R. Simplot Company offers a very competitive wage and benefit package. Qualified candidates should submit application with resume to:

J. R. Simplot Company

Attn: HR Manager

14124 Wheeler Rd. NE

Moses Lake, WA 98837

[click here if you would like to submit your resume for this position](#)

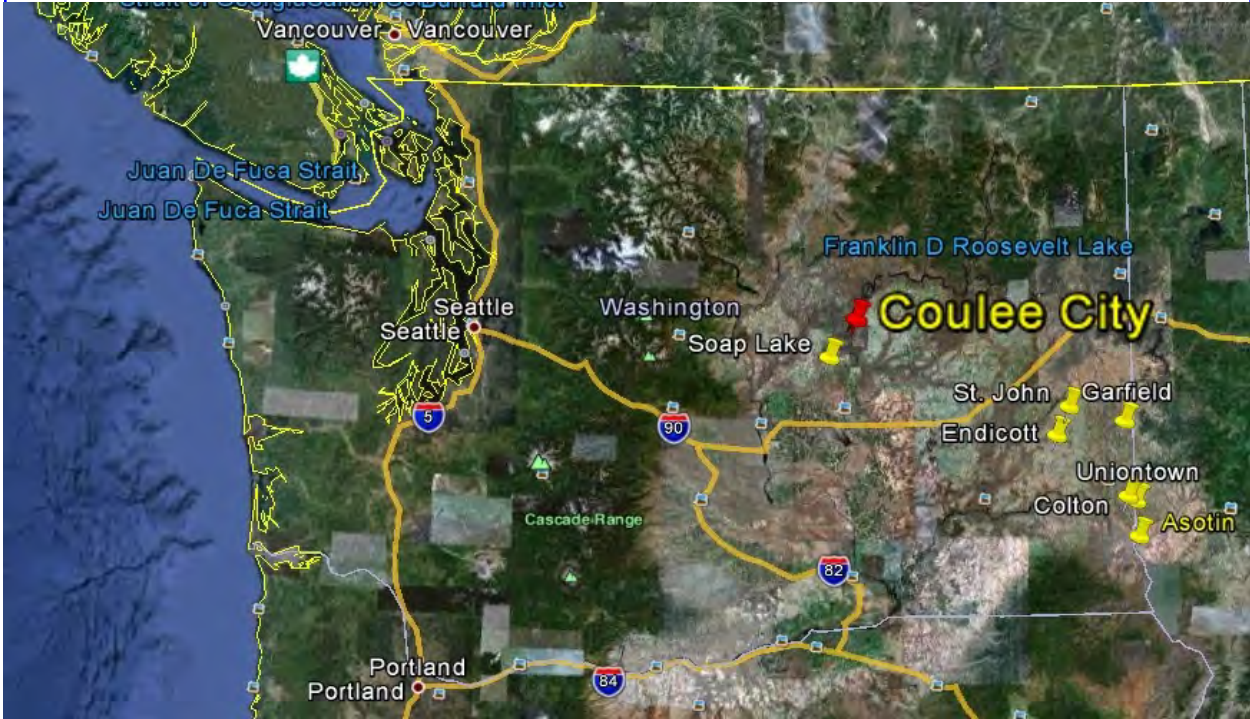
A complete description of the position and a link for applying is contained in the link above. [Note! The link may not work in a .pdf file. If you’re interested in the position and the link won’t work for you, email me and I’ll send it by email.] The cutoff date for applying is February 29th, 2012.

Good luck! Thanks, Jackie!

Cool Idea of the Month, December 2011:

This month we fly to the Town of Coulee City, WA, in beautiful Grant County.

Location map courtesy of Google Earth© (at the red place marker) :



Close-up aerial view of the facility courtesies of Google Earth©, imagery date 6-30-2006:



Cool Idea of the Month, December 2011 cont.:

Chuck Singleton is the Public Works Director at Coulee City. He handles it all; snow plowing, sanding, street repair, parks, drinking water, collection system maintenance, wastewater treatment, the whole enchilada. He gets some help from local citizens on a voluntary basis.

The wastewater treatment facility consists of a four-cell, non-overflow membrane lined lagoon system. The town recently completed a upgrade to the collection system (new lift station) and an addition to the lagoons in the form of lagoon cell depth data loggers.

Problem:

Historically, lagoons had (have) vertical staff gauges to visually monitor the lagoon depths. Operators are generally directed to report the lagoon depths to the nearest 0.1 ft. So that means (if they have large cells like Coulee City's) a pair of good binoculars is necessary to read the darn things.

Unfortunately, the staff gauges tend to shift around and even fall over in the wind. One facility in Eastern Washington searched for two years trying to find one that tipped over. Another problem with the staff gauges is that the numbers fade in the sun, and when the lagoons freeze over (water expands by 9% when it freezes)—what's the real depth of the lagoons? Do you include the depth of the ice? What if the staff gauges are trapped in the ice and are actually floating, concrete base and all?

Solution:

Now Chuck didn't come up with this idea, but since this is the first time I've seen them in operation, I thought my victims would be interested in this subject. The brand of depth data loggers which Coulee City uses is Global™, a xylem brand. Their website for depth data loggers: <http://www.globalw.com/products/levelsensor.html> . Here's a photo of one of their sensors (a WL 400 Water Level Sensor):



Global™ provides a variety of these transducers with varying cable lengths, depth ranges, and of course, prices. These are submersible, contain their own batteries and come with software for collecting the data logged. They even report the voltage of their batteries. How cool is that?

They even have their own barometric pressure compensation.

There are a number of other brands available. Some of the readers may be familiar with Tidbits™ , HOBO™ , etc. Some of these can monitor pH, temperature, etc. This is leading edge technology.

On the next pages, we'll show you the "big picture".

Cool Idea of the Month, December 2011 cont.:

Here's Chuck uncapping the upper end of the tube and attaching a USB cable to read the data logger. This was the first time he'd done it in the snow—he'll bring a mat along next time to protect his Dell laptop computer. This particular data logger is configured vertically in a wet well between two lagoon cells. Others are installed down the slopes of the cells as you will see.

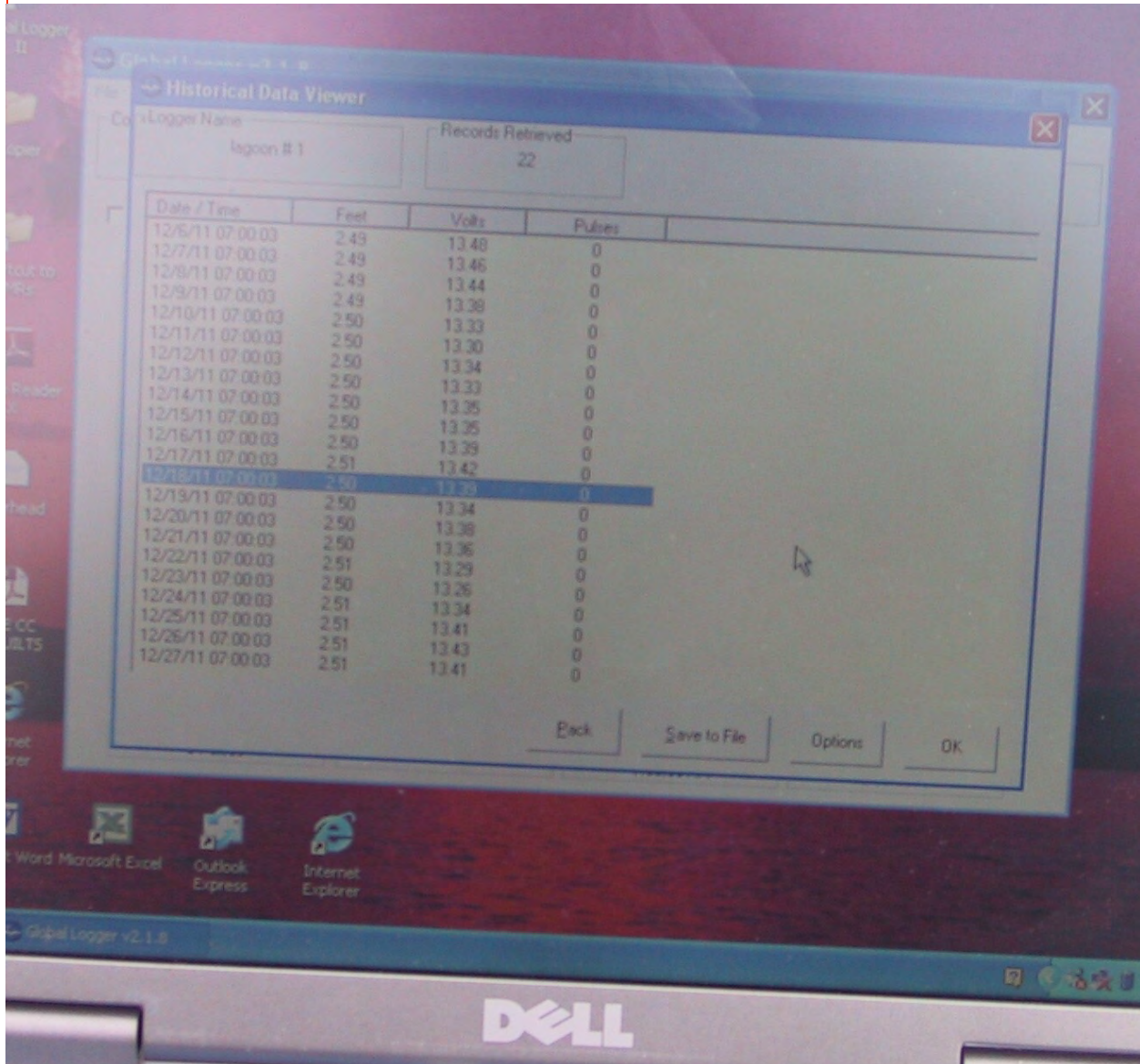


A close-up of the USB connection:



Cool Idea of the Month, December 2011 cont.:

Chuck has the depth data loggers configured to read the lagoon cell depth once per day. In the shot below of his laptop screen, he's retrieved the accumulated data from 12/6 to 12/27/2011. The columns displayed (in order) are the date, Feet of depth, battery voltage, and something called "pulses" (I'm not familiar with that last one). From his laptop, Chuck can delete the old data on the transducer if needed, save it to a file, reconfigure the datalogger parameters, etc.



The data can be transcribed to an Excel™ file for printing, charting, and reporting. [Note: you can increase the size of the view of this newsletter if you wish, to see the fine print.]

Some of the data logger brands have wireless capabilities, but I don't know if it works with submerged transducers. Wireless systems would tend to be more expensive to buy and use.

Cool Idea of the Month, December 2011 cont.:

Here's a shot of the kind which follows the lagoon slope and terminates under water. Note the presence of operator retrieval treads. 😊 And finally (bottom), a shot of old (staff gauge) and



new (next to and behind it on the lagoon slope).

Cool Idea of the Month, December 2011 cont.:

A big dam **Saaaalute!** to Chuck Singleton for taking the time to show me how this technology works, and to the Town of Coulee City for utilizing this cool idea! I'd mention the name of the engineer and his firm who put the technology into practice, but I've forgotten it. Maybe Chuck will let me know before next newsletter and I'll post their information.

Important Lab Accreditation Info for 2012 and beyond:

Quoted from an email by Alan Rue, Lab Accreditation Unit Supervisor:

Greetings,

We are making two big changes in the way we accredit parameters that should make Proficiency Testing (PT) reporting easier for you, as well as facilitate our PT tracking:

- ▶ We have begun listing the version/revision of each method on Scopes of Accreditation. Therefore, when you report PT results to your PT provider, you will need to start using the TNI/NELAC method code for the latest method revision, instead of using the TNI/NELAC method code for the generic method. This will simplify PT reporting for those of you who are accredited in multiple states, because you already use those method codes. The next time we revise your Scope we will update it to list the latest method revisions, which normally will be at your next accreditation renewal. After you receive your revised Scope, when you report PT results to your PT provider, you must report the TNI/NELAC method code for the latest method revision that will be listed on your new Scope, instead of using the TNI/NELAC method code for the generic method.
- ▶ We will soon be accrediting Organic parameters at the analyte level instead of by organic analyte group, e.g. VOCs, BNAs, PCBs, Pesticides, etc. (This will not change your PT reporting, because you already report at the analyte level.) We expect to start listing the organic analytes on Scopes in January 2012.

You can find the current method codes for your lab by entering part or your entire lab name in the "Laboratory Name" box on our lab query web page: <http://www.ecy.wa.gov/apps/eap/acclabs/labquery.asp> and then clicking on "Show results" at the bottom of the page. Then, when your lab name appears in the query results, click on your lab name for the list of your Accredited Parameters with codes. After we have updated your Scope, you will be able to find your new method codes there, but your new method codes will not be available until after we send you a revised Scope and then updated our web page – check the "Last Updated" date near the top of our lab query web page.

If you want to add new parameters to your Scope, you can find the list of Method and Analyte codes on The NELAC Institute (TNI) web site: <http://www.nelac-institute.org/TNIcodes.php>.

As we move forward with the implementation of the automated Proficiency Testing (PT) tracking system in our database, we want to be sure you receive credit for your PT results, so please keep in mind the 3 key elements to include for every study. These items are **critical** to the error-free uploading of your study results into our database:

- 1) Your "**Participant Identifier**" aka "**EPA Lab ID**" or "**USEPA Code**" which is a 2-letter state abbreviation followed by a 5-digit number. If your lab is located in Washington, your EPA lab ID is in this format: **WAxxxxx**. Note that this is **not** your Ecology Lab ID on your Certificate. It is also **not** your NPDES number.
- 2) Your **Method Codes**. These codes are available on our web site for the specific methods for which your lab is accredited. You can view the codes alongside the methods for which your lab is accredited by entering your lab name on our search page (see above). The codes listed in the column labeled "**method_id**" are the codes you **must** use when you report data to your PT provider. These codes are also listed on your Add/Delete form included with your renewal application packet.

Important Lab Accreditation Info for 2012 and beyond, cont.:

3) The **Method Descriptions**. These are listed next to the method codes in the Accredited Parameters list you get when doing the search described above, and are also listed on your Add/Delete form.

If your PT provider has a place to enter the NELAC Analyte Code, please enter that also (your PT provider may not have this option).

As we move into 2012, we will be fully utilizing our automated PT tracking system, so you should now be reporting the above critical information for your PT studies. After March 2012, we may not be able to continue or renew your accreditation for your requested parameters if you or your PT provider have not reported the above information correctly.

There will be some "lag time" in the transition of changing methods on your Scope, so don't worry if you happen to report old codes based on your current Scope, just before we revise it to list methods with the new codes; you will still get credit for those PTs. However, you may start using the TNI method codes for the latest versions now, even before we have revised your Scope with the new listings.

If you have questions or need help, please call the lead auditor for your lab or Ella Rae, our Environmental Specialist, or me, and we will be happy to help you. Here's our contact info:

Aimee Bennett	(360) 895-6179
Margaret Datin	(360) 895-6176
Dennis Julvezan	(360) 895-6147
Kamilee Ginder	(360) 895-6148
Ella Rae	(360) 895-6145
Alan Rue	(360) 895-6178

As a reminder, you need to submit only one passing PT result with your renewal application for each parameter for which you were granted full accreditation at the time of your last renewal, and with each future renewal application, as long as you continue to achieve satisfactory results. You need to submit one passing PT with your renewal application each year for any microbiology parameters for which you are accredited under Drinking Water and/or Non-Potable Water.

I am happy to announce that as of October 3, Kamilee Ginder is our Organics Specialist. Kamilee worked at Ecology's Manchester Environmental Laboratory beginning in 1998. Over the last 13 years she has worked in both the organic and inorganic units at MEL, in sample preparation and chemical analysis. This combination of experience has prepared her well to be an Environmental Lab Auditor. Kamilee is the lead auditor for about 100 labs, and is also our Organics Auditor for all labs accredited for Organic parameters. Kamilee is happy to serve you for accreditation of Organic parameters.

From all of us in Lab Accreditation, to all of you, we wish you Happy Holidays and all the best in the New Year!

Alan Rue

Lab Accreditation Unit Supervisor

Washington State Department of Ecology
P.O. Box 488
2350 Colchester Drive
Manchester, WA 98353-0488

(360) 895-6178 (360) 895-6180 fax

WERF Fact Sheet Available:

The Water Environment Research Foundation has released its fact sheet titled “Energy Production and Efficiency Research—The Roadmap to Net-Zero Energy. It’s available [here](#) for downloading.

There’s some interesting information contained therein. For example, did you know that aeration accounts for approximately 60% of the energy used at a typical wastewater treatment facility? The fact sheet outlines the kinds of energy available in wastewater and biosolids, current research on methods to recover it, and so on. I understood all but the biggest words—but they’re quick to define them. 😊

FaceBook Group:

The Friends of New Wastewater Operators Newsletters group is located here:

<http://www.facebook.com/groups/fonwon/>

WWTPO Certification Study Session Scheduled in Grandview-update:

Unfortunately I had to cancel the session due to a death in my family. Hopefully we can re-schedule for a date in January 2012. If you showed up for it, I apologize. It was cancelled on very short notice.

Guidance Manual for performing an Industrial User Survey:

You municipal operators probably have to produce an Industrial User Survey at least once per permit cycle. Well, there’s a new manual available to help you complete it. This from an email by Scott Mallery, Eastern Region Pretreatment and Industrial facility Engineer:

“Hi Everyone! It is official...Ecology has a manual in pretreatment that is not draft. This is for Industrial User Surveys which all municipals need to do once awhile. For facilities over 1 MGD, they should probably do the survey once a permit cycle and should also update their local ordinance and local limits. For all other facilities, they should do survey, review local limits, and updated their local ordinance every other permit cycle. If these smaller facilities haven’t done survey, they should do it in their next permit and include updating local ordinance and local limits too.”

The manual is downloadable [here](#).

Happy New Year to all. May 2012 be one of your best.

Keep up the good work! See you next time.

All the best to you and yours,

Darrel Fleischman

Publish date: 01-01-2012

P.S. If you want off this list for any reason, just let me know.

P.P.S. All previous newsletter issues are available by email.

P.P.P.S. Feedback is welcome, both positive 😊 and negative 😡, so let me have it! You and your opinions are appreciated.

P.P.P.P.S. My Wastewater page is located here: <http://www.whiteravendata.com/Wastewater.htm>

And here's a disclaimer. Just about everybody receiving this newsletter knows where I work, but I should tell you this newsletter is not endorsed by, contributed to, or reviewed by the Washington State Department of Ecology. It's all done on my own time, my home computer, and using my personal email address and camera. I swear!

See a puddy tat photo and a link to an article on the next page. Enjoy!

Parting Shots:

Mr. Bear says he's not a happy Santa, and he will get even...Digital, Christmas 2007



Katy Landers of the Wenatchee WWTP (thanks Katy!) sends us a link this article about using a water treatment plant for producing moonshine! <http://boston.cbslocal.com/2011/11/29/groton-town-worker-accused-of-using-water-plant-to-make-moonshine/> . Can you say "federal rap"?