



## **Here's what a few workshop attendees had to say after attending a recent 2 – day lagoon troubleshooting workshop in Missouri:**

*“I have attended a lot of classes on numerous environmental issues and would rate your wastewater lagoon troubleshooting workshops as one of the best I have been to. I have worked in the environmental field for over thirty years and much of it with wastewater treatment. Early in my career I worked with regulating and helping cities deal with lagoon problems. Your workshop is right on the money, plus I learned some details about why things happened and how to correct them. Your workshop really helped expand that knowledge. Definitely a workshop for anyone who works with lagoon treatment, no matter how long they have worked with them”*

**...Kevin Wideman, Missouri Department of Transportation, Jefferson City, Missouri**

*“Going in to the class Jim and I were skeptical that anyone could come up with two days of information on lagoons. Boy were we surprised! We enjoyed the class and were amazed at the technology available. We came away with many ideas we plan to put into action within our lagoon system. We believe we can now take our systems well into the 21<sup>st</sup> century. We both recommend this class to anyone that operates a lagoon system. THANK YOU!”*

**...Cecil Gilkey, City of Higginsville Municipal Utilities, Higginsville, Missouri**

*“I enjoyed the workshop very much. It was very informative and I came away with knowledge to help me run the Algoa Lagoon that I am responsible for. The class room was quite nice and the presentation of the material was easy to comprehend and follow. Thank you very much for an enjoyable and understandable class”*

**...R. Keith Mayor, City of Jefferson City, Missouri**

*“One of the best classes I've attended. What could have been a very boring 2 days turned into a very informative 2 days with many cost effective solutions presented. If you operate a lagoon, you need to attend this class”*

**...David E. Goebel, Operator, Alliance Water Resources, O'Fallon, Missouri**

*“I felt the class was very informative. There was a multitude of valuable information that I have been incorporating into my system. I would like to attend more of these types of classes”*

**...Jeff Caffey, City of Conway, Missouri**

*“The lagoon troubleshooting workshop gave me the information I needed to operate my lagoons in an effective manner. Most notably how to minimize sludge accumulation to postpone a costly maintenance chore”*

**...Arthur W. Rice, Developer, Hillers Creek Subdivision, New Bloomfield, Missouri**

*“I felt the class provided a tremendous amount of information for anyone associated with running a lagoon system no matter what your experience level might be”*

**...Dan Wilson, Operator, Unionville, Missouri**

*“The training provided by H & S environmental was very informative and educational from the rookie to seasoned operators in the wastewater industry”*

**.... Curtis Hedrick, Wastewater Manager, Board of Public Utilities, Tarkio, Missouri**

*“Steve provided the most lagoon information in one spot anywhere in the country...the most information for your buck anywhere”* .... **Claude Conner, City of Warrensburg, Missouri**

*“The book I received is a really good reference book. The class was a success and I would like to attend any other classes you might put together in this area. Thank you”*  
.....**Wes Atkinson, Operator, City of Campbell, Missouri**

*“This was a very informative course”*  
.....**Mike Elder, Board of Public Works, Malden, Missouri**

*“The workshop was well presented. The information provided was useful and informative. I felt that the speakers were well prepared...hop you will be sponsoring another seminar in Columbia soon...Great Job!*  
....**Kevin G. Pace, KLR Sewer Company, Fulton, Missouri**

*“I have been looking for classes that would help me run our system better. I found what I was looking for in the Wastewater Lagoon Troubleshooting class I attended. It was worth every penny. I have now started looking at problems I have had for years and now have plans to fix them. If I have the chance, I will attend the class again, and I will recommend this class to everyone I know that deals with lagoon systems.*  
...**David Bethel, Water and Wastewater Supervisor, City of Kingston, Missouri**

*“I felt that the info was very useful and informative about the way lagoons treat waste. The part on sludge reduction was the most interesting for me. Even after 24 years of operating lagoons, I learned new ideas and techniques that will help me do a better job.”*  
...**Mr. Frank Hudson, City of Auxvasse, Missouri**

*“The lagoon troubleshooting workshop was very informative and the instructor was very knowledgeable about the subject. I learned different techniques for problems that I had not thought of. Class participation about problems with their systems was also a useful tool. I would highly recommend this workshop for anyone with lagoon treatment systems.*  
...**Darl Salisbury, Water and Wastewater Supt. City of Unionville, Missouri**

*“I enjoyed the class on lagoon troubleshooting that I attended. I have started other sampling throughout our lagoon for more reliable information in the operation and troubleshooting of the plant. Being in the wastewater field for over 30 years, I enjoyed the class you taught. I would recommend anyone having lagoon problems to contact you for assistance. Again I enjoyed the class thanks!*  
...**Tommy Stanley, Wastewater Superintendent, City of Sikeston, Missouri**

*“This is the only workshop that I have attended that dealt totally with lagoon operations. I found the workshop to be very informative on several different subjects. I would recommend the class to anyone dealing with any type of lagoon system. Thanks so much.*  
...**Mr. Lary Polk, City of Matthews, Missouri**

*“The instructor had a lot of knowledge about wastewater. The way that the class was put together was great. The instructor had a lot of information on lagoon operations. I enjoyed the class and got a lot of information that will help me in making decisions about my lagoons.*  
...**Mr. Kevin Richardson, Wastewater Operator, City of Albany, Missouri**

*“I very much appreciated the workshop’s emphasis on practical, low-cost approaches to diagnosing and solving lagoon problems and taking practical steps to enhance nature’s processes. As manager of a*

*15-year old lagoon, I considered the section on sludge Removal to be the most helpful section of the workshop. I was pleased to learn of practical low-cost ways to mix the lagoon and remove the sludge.*

**...Mr. Scott Martin, Chief Operator, Pine Ridge Farms, Barnett, Missouri**

*"I really enjoyed your lagoon troubleshooting workshop. I was really looking forward to this workshop because I had lots of questions about my lagoon system. It was the best class on wastewater lagoons I have ever been to. The next time you come back for a 2 day workshop I'll be there.*

**...Harry Edwards, Operator, I-70 Mobil City, Kansas City, Missouri**

*"Your lagoon troubleshooting workshop was excellent. The discussion about blue green algae and duckweed were very helpful to me. O found the workshop very helpful."*

**...Robert Shawcross, Engineer, Cedar Hill, Missouri**

*"This workshop was the best I have been to. You dealt directly with me and my lagoon problems.*

**...Bobby J Thorington, Operator, Mercer, Missouri**

### **What past attendees think about the workshop:**

*"Your recent workshop in Stockton [California] was fantastic. I am still receiving many requests for your workshops in our state. Your new troubleshooting manual is accurate, current and very operator friendly! It's well written in an easy to read format. Your case studies are real, and similar to day-to-day operations at most any wastewater pond system. Your training sessions are "top drawer" and extremely helpful to lagoon operators. The feedback I have received from attendees of your classes have been most excellent! Thank you very much"*

**...Pat Conway, Wastewater Trainer, California Rural Water Association**

*"H&S Environmental's Lagoon Troubleshooting Workshop is the best lagoon training I've ever attended. I have recommended this training to operators and engineers alike. I use the Lagoon Troubleshooting Manual and have recommended it also to other wastewater professionals"*

**...Susan Maupin, Wastewater Circuit Rider, New Mexico Rural Water Association**

*"I would like to thank you for the opportunity to express my opinion about the usefulness of your book on lagoon systems. It has been a great help in troubleshooting some of the problems that arose at our Southland Wastewater Plant. We had problems with consistency in meeting our discharge requirements and had other performance problems at the plant. Reviewing chapters 2, 3, 6, and 7 were of great help in providing us more information which we used in the correction and improvement of our plant's performance ...Thanks again".*

**...Dan Migliazzo, Utility Supervisor, Nipomo Community Services District, Nipomo, California**

*"This workshop and manual is a stellar example of how to get more from your lagoons with less. I know I could attend this same seminar ten times and still keep coming out with great new ideas...This was an excellent seminar!"*

**...Steve Lindquist, American Crystal Sugar, Drayton, ND**

*"As I told my supervisor and the rest of the utility team here at Cargill, your workshop was the best one I have ever been to. You went along with the book chapter for chapter and if we had questions you would stop and answer it. Very informative workshop. I enjoyed it both days. One did not get bored sitting in your class. Excellent! I would tell everyone who works with lagoons to attend."*

**....Gary Brandt, Wastewater Operator, Cargill Sweetners, Whapeton, ND**

“This class is a must for anyone who works with lagoons. It was very informative and well planned. The instructor has worked with lagoons for many years and has hands on experience with many of the problems facing wastewater treatment operators. The manual is easy to follow and there is after class support available from both instructors and their website.”

**...Elena Seon, Enforcement Officer, MO Dept. of Natural Resources, Water Protection Program**

“Just like any other class, I went for the CEU’s. But the class turned out to be the best lagoon class I have been to. I got more out of this class than any other class I’ve been to. I brought things back to our city from this class and used them in our lagoons. I solved some pH, odor, and algae problems and would attend the class again.”

**...Eric George, City of Lapwai, Lapwai, Idaho**

“My perception of the class was that it would be just another rehash of the same information that other classes cover on lagoons and for this reason I was somewhat reluctant to attend. But it turned out to be an excellent class and I did pick up some useful information.”

**...Rick Schultz, Wastewater Superintendent, City of Fruitland, Fruitland, Idaho**

“This was without a doubt the most informative training on lagoons I have had to date. The instructor spoke on a level of understanding and the topics discussed were picture clear. The best training I have ever attended.”

**...James Groth, Wastewater Supervisor, City of Ririe, Ririe, Idaho**

“I thought this was just going to be another class (long, dry, boring, etc.) The class was very interesting and the day went by fast! I learned a lot about lagoons, how to reduce sludge, how to save money by using different methods. I am looking forward to attending another one of your classes”

**...Brett Laird, Operator, City of Parma, Parma, Idaho**

“I was excited about the class and it was everything I thought it would be and more. Very informative, lots of different ideas and a GREAT BOOK that came with it to!”

**...Ken Steinhaus, Wastewater Superintendent, City of Parma, Idaho**

“The workshop was very good in my opinion and I hope we have it again”

**...Dan Doramus Operator, City of Kooskia, Idaho**

“I really haven’t had much education in lagoons before this class. I hit the jackpot! This was the most intense training course and the book is indeed the bible concerning lagoons. I would and I will recommend this course to any municipality or businesses that use lagoons treatment.”

**...Roy Crumrine, Wastewater Supervisor, City of Hazelton, Idaho**

“The lagoon troubleshooting class put on by H&S Environmental was by far the most informative class I have ever attended. If you are having trouble meeting your lagoon’s discharge permit requirements, then attending one of these troubleshooting and optimization classes will help get your plant in compliance. This class will teach you how to get the best performance out of your lagoons and save you lots of money at the same time.”

**...Mr. Tony Elfering, Wastewater Specialist, Idaho Rural Water Association**

“Great workshop...looking forward to more!!

**...Mr. Timothy W. Bull, Missouri DNR**

“Your classes are always worthwhile to me. They contain great information that have produced positive results in our system. I would recommend you classes to anyone working in the wastewater business”  
...**Charley Rennaker, Public Works, Genesee, ID**

“The most important thing I got from your class is how to improve my ponds without spending a lot of money. It seems that everyone else wants us to spend a fortune on solving our problems”  
...**Allen Uhlenkott, Wastewater Operator, Fenn, ID**

“I learned a lot about pond biology and the most efficient use of aeration. The class was very interesting. Usually I have a hard time staying awake during classes. But not this one. The class was structured to give operators the time to ask questions about how the information related directly to their systems. I would recommend this class to anyone interested in lagoons”  
...**John Sherman, OIT, Santa/Fernwood Water & Sewer, Fernwood, ID**

“I thought the workshop was very informative and a great source of information for me and others that attended. The thing I liked best about the workshop was the fact that the instructor was well versed in the field while not talking over the heads of the audience. I would very much like to attend another workshop given by your company and sincerely hope the MRWA will work with you again in the not too distant future”  
...**Gene Thurman, Area Manager, Environmental Management Corp., Hillsboro, MO**

“Troubleshooting Wastewater Lagoons was a unique class that helped operators solve real world problems. Because I attended the class I feel more adequately prepared to ensure that our treatment process operates at optimal levels. It was nice to learn that there are resources available to aid lagoon operators.  
... **Garrett P. Vandenberg, McCormick Distilling Co, Weston, MO I**

“ I have attended only one other lagoon system class besides yours, but your class was 100 times better with more information and tools. I just wish I could have gotten some of my board members to attend. As far as I am concerned, your class is the only class worth attending. In fact, I think this class should be a requirement for all wastewater operators”  
...**Randy Bartlett, Wastewater Operations, Elk City, ID**

“I enjoyed your class at Odessa, MO and would be glad to attend any of your classes in the future. You know how to keep everyone’s attention. Great presentation. Thank you for the opportunity”  
...**Mike Clark, Lowery City Missouri**

“I was a little reluctant to attend the 2-day workshop. Lagoon classes in this area are not done by people who really know about lagoons. I feel I learned a lot more about how little adjustments can have big results. I also think that you taught in simpler terms that people like me could understand. I now have more ideas on how to tweak the two different lagoon systems that I take care of. You kept my attention through the whole two days. I hope you do more training in this area”  
...**Rich Mara, City of Hornersville, Hornersville, MO**

“After having taken CEU classes over and over the same old material, this class was a refreshing change. It was not only interesting, but in my opinion, a must take class for anyone with a lagoon system.”

... **Brad Hadden, City of Paul, Idaho**

“Excellent class, lots of info, sound and useful. I am currently putting some of the info to use. I was especially pleased to find that a lagoon live span can be extended with so little cost”.

...**Jimmy Smith, Basalt City, Idaho**

“I have been attending school for the city of Vale of the last 20 years! – This is one of the best classes I have every attended”

...**Les Bertalotto, City of Vale, Oregon**

“I would not hesitate to recommend this workshop to anyone who has a problem with their lagoons”

...**Ron Melton, Idle Wheels MHC**

“I’ve been doing work on our lagoon for over 10 years. We hired a consultant and we were still at a loss. Everyone here at Paul Housing seemed unable to help. When I went to schools offered from our state agency I was left unfulfilled. No answered. I didn’t expect anything different from your class but I was extremely surprised. You answered all my questions fully. This was the information I was looking for. I would recommend this class to anyone willing to learn”.

...**Tom Walton, Paul Housing Authority, Rupert, Idaho**

“I’ll recommend this training to other operators. The class gave me a better understanding of lagoon function and the biology involved. It’s difficult to find information that’s useful and complete for lagoon operations and maintenance. The training manual that is included in the class is both of these things.”

...**Jeffrey “JD” Harris, INL-CFA, Blackfoot, Idaho**

“This is without a doubt the best class on lagoons I have ever attended. I got some great ideas on sludge removal options and D.O. testing. It was money well spent. Anyone with lagoons should attend this class.”

...**Randy Severns, Village of Mendon, Ohio**

“I expected a long day with a lot of redundant info but boy was I wrong. I was very happy with the instructor and class content and learned many new things. I learned new ways to approach old persistent problems. Your lagoon class was very much worthwhile and I have already recommended this class to others in Michigan. THANK YOU!

...**Pat Gifford, Northwestern Water & Sewer District, Bowling Green, Ohio**

“The lagoon class was beneficial and I would recommend it to all other lagoon operators. The class gave me a better understanding of the relationship between the different BODs and different sludge removal techniques.”

...**Stan Sutter, St. Henry WWTP, St. Henry, Ohio**

“I was very much looking forward to the workshop. Before attending I figured any options for sludge removal would be very costly. I found out otherwise. After attending, I realized there are a lot of options to better run my lagoons for better treatment which will lower our costs. I felt the workshop was very well worth the cost and my time and the class was well presented. I would recommend this workshop to other operators.

...**Don Bruns, Coldwater WWTP, Village of Coldwater, Ohio**

“I enjoyed the class and was happy from the start to see a seminar offered that dealt with the topic of lagoons. It seems to be a topic not discussed much, but with the attendance [at the Ohio Class], it is obvious that it is a subject of great demand. Lagoon plants always seem to get a back seat to activated

sludge and other types of plants. If any community has the size to install ponds I personally think they are fools not to go this way. With lagoons, the costs of day-to-day operations are nil. Thank you”

**...Bradley Kitchen, Deshler WWTP, Deshler, Ohio**

“I attended the Wastewater Lagoon Troubleshooting and Optimization Workshop presented by H&S Environmental, LLC. I am employed by the Stark County Sewer District, and have held an Ohio Class 3 Wastewater Operators license for thirty years. I found the workshop to be interesting, informative, well-paced, and filled with good visual aids. There were many photographs of existing lagoon systems that illustrated the problems and solutions being discussed. The seminar seemed to be designed to engage operators of all levels of experience and ability. There was information of use to new operators as well as the seasoned operator. No one I talked to afterwards was bored or disappointed with the class. When I returned to work, we made plans to begin some additional testing so we could analyze the performance of our lagoon with the math tools presented in the class. I would recommend this workshop for anyone operating a lagoon system or contemplating building or expanding one.”

**...Stephen E Connor, Operations and Maintenance Superintendent, Stark County Metropolitan Sewer District, Canton, Ohio**

“When I heard about the class I was reluctant to attend because like all the other classes I attended before I thought it had nothing to do with lagoons. Just about everything before was about mechanical plant operations. Some were even a sales pitch. The information I got at the class was how to operate a lagoon and how to do my job right. I learned that sometimes you have to make changes but that doesn't mean you have to spend a lot of money to make them. I learned that some of the simpler things can make a big difference. The class is worth attending and the information you have needs to be put out there and available to all lagoon operators.”

**...Paul Kramer, Village of Fort Jennings, Ohio**

“I've spent the last 6 years trying to find a class on lagoon systems. This class came as a great relief because it was extremely useful in helping me build my knowledge of the causes of lagoon problems and gave me problem solving solutions and steps for these types of wastewater treatment plants. By attending this class, I'll be better prepared when discussing with the Commissioners, lagoon problems and how go about solving them. This class was more than worthwhile and I would suggest it to anyone who works with lagoon systems. If another class becomes available, I would be very interested in taking it. Thank you.”

**...Kevin L. Loudin, Superintendent, Hocking County Sanitary Sewer District, Logan, Ohio**

“I was looking forward to your class because most other classes deal only with activated sludge or other topics and not lagoons. I now understand lagoons better and am now able to correct problems easier after going to the class. I learned that simple things can be done to make the lagoon process run better. This class was very worthwhile and I would recommend this class to other lagoon operators anywhere.”

**...Rick Monday, Arlington WWTP, Village of Arlington, Ohio**

“I was happy to find a workshop on lagoons. We have lagoons so any information we can learn is a plus for us. Many other lagoon operators were there like me who were looking for ways to stay ahead of the EPA. The class was one I could easily relate to and I will recommend this class to all operators who use lagoons to treat their wastewater.”

**...Don DeMange, Public Works Director, Village of Ansonia, Ohio**

“First of all thank you very much for your presentation in Anchorage. It was incredible, and the way you present it in normal language was very much appreciated. I look forward to you coming back to Alaska to do the normal two day presentation. The city of Palmer will fully participate no matter how long it is,

the information is priceless. It has been my opinion since I started operating at the Palmer lagoons that everything we are told is a theory and we have been a guinea pig every time we do anything. Your presentation proves that there really is a method to the madness and there are actual methods and ways to trouble shoot problems and know in advance what the problem is, what the solution is, and that when you get done it will work. Thank you again.

...**John Berberich, Wastewater Foreman, City of Palmer, Alaska**

“The class information was very valuable to me in assessing the current lagoon system at a facility I manage. I am looking forward to more in the future” ...**Ronald Albrecht, GSA Anchorage Alaska**

“I thought your lagoon class was the best class I have attended. It was the first class that dealt with lagoons and the problems I am having. I got a lot of insight to what is going on in my lagoon system. Thanks...Lance”  
...**Lance Kapsack, City of Wasilla, Alaska**

“I got a lot of good tips for fixing lagoon problems on the cheap. This class was very worthwhile and I would recommend it to lagoon operators in any part of the country”. ...**Emily Kloc, Anchorage, Alaska**

“I knew I would learn something at the class and was eager to get more information relevant to my lagoon system. I was very happy with the class, and gained valuable and pertinent information to my situation. I began immediately using the TSS:BOD ratio information. I would absolutely without hesitation recommend this class to all other lagoon operators”  
...**Gary Sharrett, City of Dillman, Alaska**

“I have been in the wastewater business for over 24 years. I have never operated a lagoon before moving out here to New Mexico. Your class gave me many ideas as to how to handle difficult situations. Your diligence in presenting the material was great. I feel you got your message across and most of the others in the classroom like me came away with more knowledge on how to handle and operate their systems better. I feel your class should be longer than 2 days”  
...**Daniel Chase, Organ Water and Sewer Association, Las Cruces, NM**

“We always need wastewater training. Our system is a small wetlands and a lagoon. Most other trainings have nothing to do with us. This one was just perfect”.

...**Rick Fullerton, Camel Rock Casino, Santa Fe NM**

“Your workshop was excellent and I got quite a lot of useful information from it. Your in-depth knowledge on the subject came across well in the course. Thanks again.”

...**Mike O'Shea, ANTHC, Anchorage AK**

“The class was very informative and I got the information I was looking for. I would recommend this class to all my coworkers and any other operators out there.”

...**David P. Willetto, BIE, Cuba, NM**