

Microsoft Access by Tim Shudt, Assistant Director

I am writing this article as a result of a question that I asked at our technical conference in May. At the conference I did 2 sessions, one on Microsoft Excel and the other one on Microsoft Access. At the beginning of each session, I asked the question, who was using the software? The response for Excel was greater than half of the seventy or so people that attended the class. The response to the same question in the Access class was very surprising. One person raised their hand out of seventy. After a little discussion and some investigating, I concluded that most people don't understand what Access is, or how it can benefit us as operators.

Like I mentioned previously, most operators have used Excel. Microsoft Excel is a great program for us as operators. We can create spreadsheets, calculations and graphs. Those that have used Excel realize how valuable a tool it is for us in our daily operations. Think about this. Each month we create a new Excel file and enter and store data in it. When we are done at the end of the month we stick that file in a folder. At the end of the year we have at least 12 Excel files or more in that folder. Let's say we want to summarize our data at the end of the year. How do we go about it? I guess we could open each of those 12 files one at a time and copy the data we want and paste it into a new workbook, then create totals, averages, create graphs or whatever with that data. This is one way, but there is a much easier way and this is where Access comes in.

Microsoft Access is a database program. The purpose of a database is to store information. Think of it as a big folder with all of your information in it. You can store as much information as you like in this one folder and be able to retrieve it when need be. When you do retrieve the data, you can be very precise on what data you do retrieve. You could have 20 different parameters and years worth of data in your database and have the ability to pull out one parameter, on a specified date. Or, you could pull out a few, or all, of your parameters between a specified date range. Access can be used in many ways. One way for us as operators to utilize Access, is to create a database to store our daily parameters that we track at our treatment plant. If we were using a database and had to create the year end summary of our Excel data, it could be done in less time than it takes to read this article.

Another example of a database that we could use at our facility would be for tracking maintenance records. We all have some type of maintenance record program that we use. It could simply be written in a notebook or on an index card. How many times have we gone to order the same part, for the same pump, from the same person, and had to look up their phone number and stand on our head to be able to read a model number or part number off the machine? Imagine being on the phone with the supplier and being able to look at your computer screen and see all the information about the piece of equipment with all its information. When you bought it, from whom, what maintenance has been done and so on. If we were using Access to track this information, we could find all the information for that piece of equipment in seconds. Also, we could use that database for assigning maintenance schedules for all of your equipment. Each day, week, or month,

we could run a report out of our database listing all of the equipment that is due for maintenance. In that report, we could have part numbers needed, when it was serviced last, any comments about that service, who is going to service it, or whatever else you need to keep track of.

This article was written just to make everyone aware of what Access is. Access is a valuable, flexible and fun program to use. I will be offering Access classes in the near future around the state. The classes that will be offered are Basic Access, Intermediate Access, and an advanced class using Microsoft Excel and Access together. Also I will be teaching Basic Excel and Intermediate Excel. All of the classes are “hands on” type training session. Each participant will have a laptop computer to use for the training session. All courses are designed and taught specifically to what we would use the software for. All exercises and files used during the class are based on data that we would track at a water and wastewater facility. Please visit our website for the latest training sessions available in your area. Hope to see you at the classes!