

## **T3:** Tanks, Tips, and Trends . . .

July 2015 Volume 7, Issue 3



## STILL .... UNDER CONSTRUCTION

Since early May 2015, American Structures, Inc. has been busy undergoing a major expansion effort, all the while maintaining normal operations at our Menomonie, Wisconsin location.

Work is progressing on a new 104' x 100'

## YES, WE'RE STILL OPEN WHILE UNDER CONSTRUCTION!

Expansion Efforts Underway at American Structures, Inc. ~ Page 1~



It's **THAT** time of the year , **AGAIN**! ~Page 2 ~



By the end of June, the shop expansion's walls were erected and enclosed, while interior wiring, finishing, and overhead door installation is planned to be completed in early July.



As reported in our May T3 edition, this new area will house a new, high-speed precision laser cutting machine and an expanded area for shipping and receiving, among other uses.

In conjunction with the fabrication shop expansion, additional administrative and

departmental construction expansion plans are now also underway.



As you can see from the photo above, initial excavation has begun for the administrative space expansion segment of the project. After the weather clears and the ground dries out and firms up, we'll soon be ready to pour the foundation and begin work on framing the exterior walls.

This phase of the expansion will facilitate the centralized location of all administrative and departmental staff offices, as well as enhance our reception, visitor, and conference areas.

Your interest and patience during our new expansion project construction is most appreciated. We hope that our signage efforts have alleviated any confusion when accessing our buildings. Rest assured, we continue to maintain our normal operational pace, as special care has been taken to insure that our customers, whether near or far, are NOT inconvenienced by our construction plans.

So, until our construction is concluded, which is tentatively scheduled for mid-fall, we ask for your continued patience and hope you pardon our mess. **Thank you!** 



A publication of American Structures, Inc. ~

"Dedicated to being the trusted supplier of Bolted Stainless Steel Storage Tanks."

Expansion Work Continues at American Structures, Inc.

## **T3:** Tanks, Tips, and Trends . . .



Well, it was bound to happen. It's starting to be **THAT** time of the year, **AGAIN**. Every summer, towards the end of June and beginning of July when the summer heat begins to build, so do reports of excessive blue-green algae or toxic **CYANOBACTERIA** in our Nation's lakes, rivers, and streams.

On June 30, 2015, high levels of bluegreen algae closed a swimming pier near Madison, WI at Lake Mendota. Health officials said that the beach at Goodland Park on the west shore of Lake Waubesa is also closed due to high levels of bluegreen algae. (http://www.channel3000.com/ news/Blue-green-algae-closes-swimming-pier-at-Wisconsin-Union/33846642).

While Blue-Green Algae always makes the news feeds throughout the summer, it isn't always reported just **WHY** these types of algae are a hazard or health issue. These unsightly and commonly odiferous blooms are easily detected by sight and smell, but many people are not aware that they can also be hazard to the health of you, your pets, and livestock.

Some blue-green algae (cyanobacteria) produce toxins which pose a health risk to people and animals. Health effects occur when surface scums or water containing high levels of blue-green algal toxins are swallowed, through contact with the skin, or when airborne droplets containing toxins are inhaled while swimming, boating, and water skiing. A large percentage of the public will report "allergic" type reactions after exposure to blue-green algae, such as intestinal problems, respiratory issues, or skin irritations. Harmful Algae Blooms can appear (or disappear) rapidly. Always be mindful of any unusual look to the lake including a green or brown color, scum, paint-like appearance, or odor. (http:// www.kdheks.gov/algae-illness/)

Symptoms of blue-green algae (cyanobacteria) exposure include:

Common human symptoms associated with blue -green algae exposure include:		
Respiratory	Dermatologic	Other
Sore throat	Itchy skin	Earache
Congestion	Red skin	Agitation
Cough	Blistering	Headache
Wheezing	Hives	Abdominal pain
Difficulty breathing	Other rash	Diarrhea
		Vomiting
		Eye irritation
Animal Symptoms Lethargy Vomiting Diarrhea Convulsions Difficulty breathing General weakness		Some blue- green algae blooms, like <b>CYANO-</b> <b>BACCTERIA</b> have reportedly caused deaths to pets and

wildlife. To date, no human deaths have been attributed to their effects. However, nerve and liver damage have been observed following long-term exposure from drinking water with toxic blooms. (http://www.ecy.wa.gov/programs/wq /plants/algae/publichealth/GeneralCyanobacteria .html)

Nutrient-rich bodies of water such as some lakes or ponds may support rapid growth of cyanobacteria. With the right conditions, a "clear" body of water can become very turbid with green, bluegreen, or reddish-brown colored algae within just a few days. High concentrations of an alga species in a water body form "blooms." Many species can regulate their buoyancy and float to the surface to form a thin "oily" looking film or a blue-green scum several inches thick. The film may be mistaken for a paint spill. Cyanobacteria cannot maintain this abnormally high population for long and will rapidly die and disappear after one to two weeks. If conditions remain favorable, another bloom can quickly replace the previous one. In fact, successive blooms may overlap so that it may appear as if one continuous bloom occurs for up to several months.

Three types (genera) of cyanobacteria account for the vast majority of blooms, including toxic blooms, world-wide: *Anabaena, Aphanizomenon,* and *Microcystis* - sometimes referred to as *Annie, Fannie,* and Mike. A bloom can consist of one or a mix of two or more genera of cyanobacteria.

**NOT** all cyanobacteria blooms are toxic and **NOT** all that are toxic are toxic all the time. Even blooms caused by known toxin-producing species may not produce toxins all the time or may produce toxins at undetectable levels. Scientists do not know what triggers toxin production by cyanobacteria. It was previously believed that only about 10 % of all blooms produced toxins. Recent studies have shown that toxic level probabilities of Annie, Fannie, and Mike is greater than previously thought, at levels in the **45-75%** levels.

While there are short-term treatment options for controlling algae, the longterm solution involves finding ways to reduce nutrient inputs into the affected water bodies. Finding and reducing external nutrient inputs to the water body is crucial for long-term success and lake recovery. Once a bloom has formed, treating it with algaecides not recommended. Chemical treatments can cause the cells to break open, releasing toxins into the water. Many cases of human poisoning from algal toxins have occurred after chemical treatment of bluegreen blooms.

So what's to be done about this perennial blight? Due to the variety and number of companies dealing with bluegreen algae eradication that exhibited at the recent American Water Works Association Expo in Anaheim, CA, there are a variety of options that seem to be effective, but **NONE** are cheap, fastacting, **OR** 100% effective.

This man-made problem will take a lengthy, varied, and **VERY** costly approach to eradicate. It is clear toxic algae blooms are becoming prevalent, dangerous, and have spread world-wide.