Sent: Thursday, October 02, 2003 10:03 AM Subject: UPDATE: MORE NEWS CONCERNING DRUGS IN WATER Importance: High

Dear Aquathin Dealer OnLine, Splash NewsBulletin and Allergic Reaction NewsBulletin Members;

Here is another report, this time from Tucson, concerning drugs found in water. For your immediate convenience and reference, I have pasted two previous Splash NewsBulletins below on this same subject.

Of the "only" 91 contaminates regulated by EPA, NOT ONE IS FROM YOUR NEIGHBORHOOD PHARMACY, HOSPITAL OR CLINIC ! These forthcoming reports are void of another very serious source of drugs... "non human" drugs for animals. Yes, from our pets to millions of farm animals, zoos, and breeders.

Got your AquathinK-ing? I love my Aquathin !

Warmest regards to all...as well, your comments are always welcome and very much appreciated.

FOR THE BEST TASTE IN LIFE Think Aquathin..AquathinK !! Celebrating our 23rd Birthday in 2003 !!! (visit the allnew http://www.aquathin.com)

"Alfie" Alfred J. Lipshultz, President

P.S. "Splash NewsBulletins", "Forum Q & A", "Allergic Reaction", Biz Bank, Tech Bank and Quote Bank... <u>ARE</u> <u>ALL FREE</u> services to all Authorized Aquathin Dealers and their clients to keep you abreast of technology updates and industry news.

Tucson residents excrete trace amounts of medicines into sewer

September 2003

U.S. Water News Online

TUCSON, Ariz. -- Residents are excreting trace amounts of the medications they take -- from birth control to antibiotics to steroids -- into the sewer system, preliminary results of a study found.

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The substances are not necessarily stripped from the wastewater when it leaves treatment plants to head down the Santa Cruz River or to irrigate some golf courses and schoolyards around Tucson. Ultimately, some of it seeps into the aquifer that is pumped for drinking, the survey found.

Researchers are trying to determine the implications of the findings, particularly with water officials contemplating the use of highly treated wastewater as a new source of drinking water in decades to come.

"We really need to have a better understanding about the potential for it to get to the groundwater, because groundwater eventually is our drinking water," said Gail Cordy, a supervisory hydrologist with the U.S. Geological Survey.

In one lab test performed by the U.S. Geological Survey, chemical-laden water was pushed through an 8foot column of soil. A number of the chemicals, including a drug used to treat epilepsy, could still be detected at the other end.

A survey of 139 steams across the country, including four in Arizona, found at least 80 percent of the bodies of water had one of 95 chemicals. And, half of the stream waters tested last year contained seven or more of the chemicals, the U.S. Geological Survey found.

Nonprescription drugs, insect repellant and steroids were the most frequently detected. Antibiotics and hormones were often found too.

Since antibiotics combat bacteria, some question whether the quantities found will increase bacterial resistance rates. Also, reproductive hormones may have greater implications to aquatic life because even low-level exposure can cause problems.

<u>The chemicals detected were generally found in very low concentrations. But the government hasn't set</u> safety limits for most of them and scientists don't know enough about the potential health effects in humans.

A scientist at the University of Arizona's Environmental Research Lab received approval for a three-year study that aims to further explore the issue. David Walker will study the effects of pesticides, herbicides and hormones on Arizona's native fish.

----- Original Message -----From: <u>AQUATHIN SALES & MARKETING</u> To: <u>info@Aquathin.Com</u> Sent: Wednesday, February 05, 2003 6:50 PM Subject: TOXIC CHEMICALS FIND HOME IN OUR BODIES -- CHILDREN AT LARGEST RISK

Dear Aquathin Dealer OnLine;

Every once in a while you come across a prospect that makes the silly remark like "well I've been drinking this water for 75 years and its not hurt me yet !" Twenty five years ago we heard that more often than today. Either the public has gotten more educated or most of those silly commenters died off from the water...or both ! The EWG report found that its nine subjects showed evidence of exposure to an average of 91 compounds, many of which did not exist 75 years ago. The nine individuals were tested for 210 chemicals, which EWG says is the largest suite of industrial chemicals ever surveyed. In total, the nine subjects carried 76 chemicals linked to cancer. Participants carried a total of 48 PCBs, which were banned in the U.S. in 1976 but are used in other countries, and persist in the environment for decades. You know why children are the largest risk group? Easy...they are born in this day and age in which the problems are manifesting....its all around everywhere you go. 25-50 years ago, doctors thought cancer, cardiovascular diseases were "diseases of chronicity"...a result of getting older if you will. Cancers now even have names when it attacks kids..."childhood leukemia". The rate that such diseases have risen in young demographics IS an environmental problem. The article below should be made available to Customers who are parents to help support their decision to protect their families with the very best home water security system possible.

What you can do? You Authorized Aquathin "sharpees" know. Limit and reduce exposure -- flush them out. Stop bathing in and breathing in VOC's in showers and baths. Hydrate with copious quantities of purified (that means 2 parts hydrogen 1 part oxygen and no parts anything else = Aquathin Patented Process) to flush out. Now understand this....when you're out at a restaurant, hotel or Aunt Minnie's and you drink a soft drink,iced tea or coffee for example, unless it and the ice are made from an Aquathin system, you are intaking the chemical cocktail mentioned below...and equal to the test candidates discovered to have 91 (91 out of 10,000 new chemicals manufactured each year) of the chemicals looked for.

A personal note: After 25 years as a water treatment professional, I am personally pleased more than ever that such a dearth of information is coming out, and that the Aquathin Spash NewsBulletins and Forum Q & A make it immediately available to you. Thank you for your many comments in agreement and and for appreciation of the newsletters. We love our Aquathin !

Warmest regards to all,

FOR THE BEST TASTE IN LIFE Think Aquathin..AquathinK !! Celebrating our 23rd Birthday in 2003 !!! (visit the allnew http://www.aquathin.com)

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Toxic Chemical Study Sounds Warning for Children

By J.R. Pegg

WASHINGTON, DC, February 4, 2003 (ENS) - The most extensive study of the toxic chemicals to which Americans are exposed has found encouraging evidence that levels of lead, pesticides and tobacco related chemicals have declined over the past decade. But the report, released last week by the U.S. Centers for Disease Control and Prevention, offered worrying evidence that children are more exposed than adults to a range of toxic chemicals.

The report is the largest and most detailed study of the U.S. population's exposure to environmental chemicals. It analyzes exposure information for 116 environmental chemicals, more than four times as many as the previous study by the U.S. Centers for Disease Control and Prevention (CDC), published in 2001, which looked at exposures to just 27 substances.

Many of the toxic substances reviewed in the study are already restricted or banned, but remain environmental and health problems, such as PCBs - now banned from most U.S. uses. (Photo courtesy U.S. Geological Survey)

The CDC is an advisory agency, not a regulatory one, and its officials stressed that the primary benefit of the report is as a baseline for future studies.

"In order to make sound public health decisions that help us correctly identify and prevent health problems, we must have reliable information about exposure to environmental chemicals," said Dr. David Fleming, deputy director for science for the CDC. "That's the purpose of the National Exposure Report ... and this second report is a quantum leap forward in providing objective, scientific information about what's getting into people's bodies and how much is getting in."

"We do not have new health effects information coming out from this report," added Dr. Richard Jackson, director of CDC's National Center for Environmental Health. "It would not be possible to say that we have a new understanding of health effects from exposure to chemicals. [But] this kind of information is what moves the science forward to answer those health effect questions, and by finding out what are in people and what levels are typical in the population, we're moving a lot of studies forward that will give us that information much faster."

But CDC officials are clearly concerned about the report's findings with regards to children's exposure to nicotine related chemicals such as cotinine.

Cotinine is a major metabolite of nicotine and regarded as the best biomarker in active smokers and in nonsmokers exposed to secondhand smoke, also known as environmental tobacco smoke.

Children showed far higher blood levels of a biomarker for cigarette smoke exposure - twice as high as non-smoking adults. (Photo by Adam Hart-Davis/<u>DHD Photo Gallery</u>)

Cotinine levels for nonsmoking adults fell 75 percent, but decreased just 58 percent for children and 55 percent for adolescents. Children had cotinine levels that were more than twice as high as levels in adults, and non-Hispanic blacks had more than twice the levels of either Mexican Americans or non-Hispanic whites.

CDC officials said the overall declines in exposure level support the effectiveness of public health efforts, but added that these efforts have focused on adults at work or in restaurants. Further efforts to reduce exposure to children, adolescents and non-Hispanic blacks are warranted, Jackson said.

"One third of all of our cancers are from tobacco," Jackson explained. "It's one of the big killers in America and more than half of our kids still have environmental tobacco smoke exposure when environmental tobacco smoke is known to be associated with sudden infant death syndrome, with ear infections, respiratory infections and the rest."

"If we had to pick something to really go after, that would be one that I would really argue is an extraordinarily high priority and something people can actually do something about," he said.

The Second National Report on Human Exposure to Environmental Chemicals cost the federal government some \$6.5 million over two years. It analyzes blood and urine samples that were collected from some 2,500 participants who are part of the National Health and Nutrition Examination Survey. The participants represent a cross section of the U.S. population for the years 1999 and 2000.

Children, with their developing bodies and brains, are far more vulnerable to ingested toxins than adults. (Photo courtesy National Center for Lead-Safe Housing)

"It is an immense data set," said Jackson, adding that CDC plans to continue issuing the report every two years and to further expand the chemicals covered.

A total of 89 of the 116 tested chemicals were found to be present in at least some study participants, but CDC officials cautioned that just the presence of a chemical does not indicate a threat to human health. Risk assessments for many of these chemicals are not know for humans, but this study provides a vital tool for scientists to determine how dangerous some of the chemicals are to human health.

The report found that levels of chlorpyrifos, an organophosphate that has been used widely in the United States, are about twice as high in children as those found in adults. Retail sales of chlorpyrifos for residential use were stopped in December 2001 and with this report, scientists now have a baseline for measuring the effectiveness of this restriction.

The scope of the report will also allow scientists and researchers to watch for trends in different age groups, minorities and genders. So far, the researchers have learned, for example, that Mexican Americans have three times the exposure levels to DDE, a major metabolite of the insecticide DDT, which was banned in the United States in 1973.

Flaking paint from older buildings may contain lead. Exposure to lead can cause permanent brain damage, particularly in children. (Photo courtesy Medical University of South Carolina)

For lead, a toxic substance that researchers already know a great deal about what exposure levels are harmful, the report's findings are encouraging. Blood lead levels in children continued to decline, the study shows.

For 1999-2000, the researchers found that 2.2 percent of children aged 1-5 years had blood lead levels greater than or equal to 10 micrograms per deciliter, which is the CDC's definition of an elevated lead level. This figure is down from 4.4 percent for the period 1991-1994.

CDC officials said the continued decline of lead exposure among children in the general population is a public health success story, but warned that lead exposure is still a serious public health threat.

"Exposure of children to lead from homes containing lead based paint and lead contaminated dust remains a serious public health problem," said Dr. Jim Pirkle, deputy director for science at CDC's environmental health laboratory. "CDC and other federal partners will continue important lead poisoning prevention programs targeting interventions to eliminate this entirely preventable disease among exposed children throughout the nation."

Coal burning power plants produce large amounts of mercury and PCBs, known developmental toxins. (Photo by Carole Swinehart, courtesy Michigan Sea Extension)

Industry groups, including pesticide manufacturers and environmentalists, welcomed the CDC's report, although with differing conclusions.

"The pesticide data contained in the report indicates that the American public can be assured that the regulatory safeguards for pesticides that are in place are very tough are working as they are intended," said Jay Vroom, president of CropLife America, a pesticide manufacturers lobbying organization. "Americans can be confident about the safety of our food supply and the public health protections made possible by pesticides."

Dr. John Balbus, director of the environmental health program at Environment Defense, said the report is further proof "that children are more exposed to a wide variety of chemicals, from pesticides and passive tobacco smoke to pthalates."

Balbus praised the study for providing the depth of information needed to determine who is most at risk and what action is needed to prevent exposures.

Exhaust from diesel buses and other vehicles contains polycyclic aromatic hydrocarbons (PAHs), which some studies have linked to increased risk of certain cancers. Photo courtesy EPA

"This country spends \$1.4 trillion every year on health costs," he said. "We don't know exactly what proportion of those costs are due to environmental exposures, but we do know that health costs related to these exposures are unnecessary and can be prevented. This report is an important part of the small investment made to prevent illness."

"To the extent that the CDC report ... brings us good news," added Jane Houlihan, vice president of research for the Environmental Working Group (EWG), "it is because the government took action and regulated harmful substances such as PCBs, DDT and lead in paint and gasoline."

Houlihan's organization, in partnership with Mt. Sinai School of Community Medicine and Commonweal, released a report last week that also tracks chemical absorption in humans. But rather than measuring individual chemicals in multiple individuals, as the CDC did, EWG studied a small group of individuals for a multitude of chemicals.

The EWG report found that its nine subjects showed evidence of exposure to an average of 91 compounds, many of which did not exist 75 years ago. The nine individuals were tested for 210 chemicals, which EWG says is the largest suite of industrial chemicals ever surveyed.

Plastic trash bags and many other common plastic products can contain toxic organochlorines - known to cause developmental and neurological problems. (Photo courtesy Universal Plastic)

In total, the nine subjects carried 76 chemicals linked to cancer. Participants carried a total of 48 PCBs, which were banned in the U.S. in 1976 but are used in other countries, and persist in the environment for decades.

"The CDC's work helps us assess exposure levels for each contaminant across the population," Houlihan said. "Our study begins to document the complex reality of the human body burden - what we call the 'pollution in people'."

The CDC's report is available online at: http://www.cdc.gov/exposurereport

The EWG's report can be found at: http://www.ewg.org

----- Original Message -----From: <u>AQUATHIN TECH SUPPORT</u> To: <u>info@Aquathin.Com</u> Sent: Wednesday, March 13, 2002 4:11 PM Subject: UPDATE: MORE ON DRUGS IN WATER

Dear Aquathin Dealer OnLine;

The quick read article below is shocking conclusive findings for the fact that (ref: previous articles emailed to you) these specific issues are not confined but <u>pandemic</u>. What the article DOES NOT TELL YOU is the exact seriousness of this cocktail! You learned at Aquathin University from the report on Drinking Water and Human Health by the A.M.A., the chemical cocktail could be 1000 times worse than each individual contaminate.

AND...think about this. You already know that doctors and your neighborhood pharmacy advise you that certain drugs cannot be taken at the same time. If you follow their professional advice and swallow with tap water containing a mixture of drugs, what have you done?????!

Hundreds of years ago people living in cities threw their waste (garbage & human) out the window into the street gutters for the rain to wash away, thus contaminating the streams flowing to the residents downstream. Tired of getting sick and dying, the downstream residents trapsed off into the woods in search of an uncontaminated source of water to carry home in vessels...hence the beginning of bottled water. Today everyone lives downstream from somebody else. The quick read article tells us that 80% of water sources are contaminated water...and you can assume that since we are defining this now, the percentage will increase, and the concentrations will increase by the time tactical actions are implemented to reduce the introduction of contaminates and clean up the problem. CAN YOU SAY I LOVE MY AQUATHIN !

I respectfully recommend that you print and copy this message for assisting each of your sales professionals in their task of educating and informing your customers.

Warmest regards to all

FOR THE BEST TASTE IN LIFE Think Aquathin..AquathinK !! Celebrating our 22nd birthday in 2002 !!! (visit the allnew <u>http://www.aquathin.com</u>)

"Alfie" Alfred J. Lipshultz, President

P.S. When responding please continue 'REPLY' to include all previous correspondences on this subject.

Environment - 3/13/2002 11:31:49 AM

New study says pharmaceutical wastes taint US waters

WASHINGTON — The first nationwide study of pharmaceutical pollution of rivers and streams shows that most waterways contain some contamination from antibiotics, steroids, synthetic hormones and other commonly used drugs.

Of the 139 streams analyzed by the US Geological Survey (USGS) in 30 states, about 80 percent contained trace amounts of contaminants that are routinely discharged into the water in human and livestock waste and chemical plant refuse, the <u>Washington Post</u> reported.

Seven or more chemical compounds were found in half the streams sampled and 10 or more compounds were found in a third of the streams; a single water sample contained as many as 38 chemicals, the article said. The USGS study, which will be published in today's issue of *Environmental Science and Technology*, stresses that in many cases the measured concentration of contaminants such as painkillers, insect repellent, caffeine and fire retardants was less than 1 part per billion and rarely exceeded federal standards for drinking water.

But many of the chemical compounds detected are not covered by drinking-water standards or government health advisories, and little is known about how the interaction of those chemicals can affect humans, animals and the environment, according to the *Post*.

"Protecting the integrity of our water resources is one of the most essential environmental issues of the 21st Century," the report states, according to the article. "Little is known about the potential interactive effects" from complex mixtures of waste contaminants in the environment, USGS said.

The newspaper said water quality mirrors societal behavior and medical practices. Antibiotics and other prescription and nonprescription drugs and personal care products used widely by Americans inevitably turn up in wastewater; manufacturers and chemical plants legally dump thousands of tons of compounds into streams and rivers, and the waste of livestock treated with veterinary pharmaceuticals flows into streams.

"We're not talking about rampant dumping," a USGS Survey official said in the article. "We're looking at the effect of normal existing usage for these different chemicals."

The study, conducted in 1999 and 2000, surveyed the occurrence of 95 pharmaceuticals, hormones and other organic waste in streams across the country.

The sampling technique focused on streams most susceptible to contamination, downstream from large urban areas like New York, Boston, Chicago and Denver, or industrial plants or livestock yards.

The study was not designed to compare the water quality of different streams, OSGS said, but to create a baseline for future study by scientists of the persistence and migration patterns of the compounds and their potential impact on humans and the environment, the *Post* reported.