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Sent: Wednesday, March 31, 2004 3:57 PM

Subject: 600% ILLEGAL RISE IN POLLUTION...FROM THE GUYS THAT ARE REGULATED!!!!

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

Over the years I have provided NewsBulletins concerning legal permits for amounts of pollution allowed to be created by licensed facilities....thousands of tons legally licensed to place into streams and air. While the permits are designed to regulate, limit and even restrict wildcat dissemination of contaminates, you will read below that could not be further from reality.

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

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Environment - 3/31/2004 11:58:13 AM

Clean Water Act violations on the rise, says group

WASHINGTON — More than 60 percent of US industrial and municipal facilities exceeded their Clean Water Act permit limits between January 2002 and June 2003, according to a report issued by the US Public Interest Research Group (PIRG).

According to PIRG's news release, **the average facility in violation exceeded its permit limit by more than 600 percent**, or six times the legal limit.

"This report shows that facilities that are violating the law are doing it in a big way," Democratic US Rep. John F. Tierney, said in the release. "We need to make sure that EPA and states, who have the responsibility for enforcing the Clean Water Act, have the resources they need to do be able to do their jobs effectively."

However, WaterTechOnline has discovered that the PIRG report is not a complete nationwide study as it claimed in its release.

According to the release, "Nationally, 436 major facilities exceeded their Clean Water Act permit limits for at least 10 of the 18 reporting periods between January 1, 2002 and June 30, 2003."

Meanwhile, the Associated Press (AP) said in a story reported by the [Leesville Daily Leader](#) in Leesville, LA, that the PIRG study did not include California and Oregon in its analysis "because the states failed to provide reliable data," according to PIRG.

The PIRG release did not mention the lack of California or Oregon information.

According to the release, the 10 states with the most incidences of exceeding Clean Water Act permit limits between January 1, 2002 and June 30, 2003 are Ohio, New York, North Carolina, Pennsylvania, Texas, Massachusetts, Louisiana, Alabama, Tennessee and Indiana.

US PIRG representatives have called on the Bush administration to "back off" its efforts in what the group says is a plan to "weaken the Clean Water Act."

To read the PIRG report, click [here](#).



Sent: Friday, February 20, 2004 7:44 PM

Subject: REPORT SITES AMERICA COULD SOON BE SWIMMING IN SEWAGE

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

While this article speaks of "swimming in sewage" in the U.S. ...guess what...this problem is pandemic and growing exponentially. Additionally, you've received a Splash NewsBulletin and Forum Q & A concerning deep well injection and its failures.

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Edie weekly summaries 20/02/2004

Keeping you up to speed with news and events from around the world.

America could soon be swimming in sewage, claims report

Proposed budget cuts to America's water system could lead to the nation being swamped by sewage, a report by the Natural Resources Defence Council (NRDC) and Environmental Integrity Project (EIP) has found.

It claims that sewage pollution already costs the US billions of dollars each year in medical treatment, lost productivity and property damage and describes an emerging crisis in the nation's failure to effectively treat sewage. The report, *Swimming in Sewage*, found that a lot of sewage from homes, factories and businesses often never reaches a treatment plant and, when it does, is not treated adequately to protect public health.

The report also says President Bush's proposed budget cuts will make matters even worse.

"We have a looming public health crisis on our hands that will take billions of dollars to fix," said Nancy Stoner, director of NRDC's Clean Water Project. "We do have the technological know-how to deal with this sewage

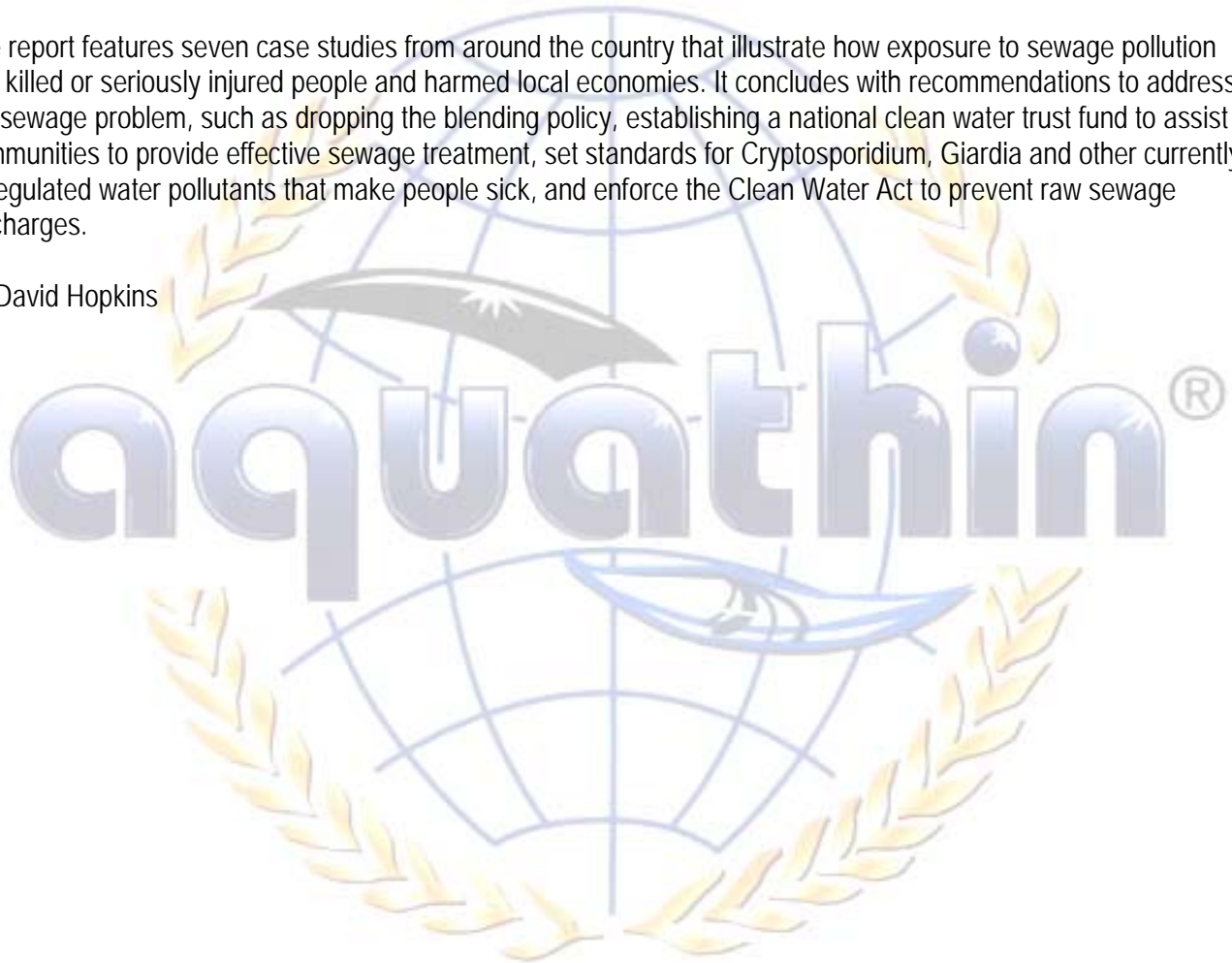
problem, what we don't have is the political will. In fact, President Bush's new budget proposal dramatically slashes funding for wastewater infrastructure. At US\$500 million, it's his biggest cut for any environmental program, and it's indefensible."

Besides the budget cut, a new proposal would allow sewer operators to discharge inadequately treated sewage in waterways when it rains. The EPA calls this proposal 'blending' as it involves mixing treated and untreated sewage. The NRDC and EIP say it is a radical departure from current treatment standards and would threaten the health of millions.

Michelle Merkel of the EIP said: "Waterborne disease outbreaks are on the rise across the country. Now is the time to boost funding to protect Americans, not cut it."

The report features seven case studies from around the country that illustrate how exposure to sewage pollution has killed or seriously injured people and harmed local economies. It concludes with recommendations to address the sewage problem, such as dropping the blending policy, establishing a national clean water trust fund to assist communities to provide effective sewage treatment, set standards for Cryptosporidium, Giardia and other currently unregulated water pollutants that make people sick, and enforce the Clean Water Act to prevent raw sewage discharges.

By David Hopkins



Sent: Wednesday, October 29, 2003 3:09 PM
Subject: UPDATE: MORE ON DRUGS IN WATER

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

*We have provided several Splash and Forum Q & A Newsletters in the past concerning the recent revelations in new information regarding the abundance of medications showing up in tap water. The quick read below provides updated information over this growing concern. Again, while the toxicity levels are not known yet, we do know this: **doctors and pharmacists often advise not to mix medications...how do you avoid this when they already are, and you may be a healthy individual not on or needing medication? Often drugs are prescribed in minute quantities i.e. milligrams and fractions of milligrams over short periods...but how do you avoid the chronic dosing exposure from tap, showers and baths?***

I do like the point the author makes about "everyone living downstream from everyone else". Now where have you heard that before ?!

Given the choice of consuming drugs and MRI fluids or not....common sense says not ! I love my Aquathin !!

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

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Boulder ground zero in disturbing water pollution survey

By CINDY BROVSKY

Associated Press Writer

BOULDER, Colo. (AP) - Traces of prescription drugs, household cleaners and chemicals from MRIs are showing up in the U.S. water supply, according to government researchers who have completed one of the most detailed surveys ever done on a single American watershed.

Just how the pollution affects people or the environment is not clear, officials with the U.S. Geological Survey said Tuesday.

But they said the results of their Boulder Creek study reflects the common medications and household products getting into the nation's rivers and streams.

The study, done in 2000, was the first to use the most advanced equipment to detect small traces of chemicals. A nationwide study was done the same year, but did not have the same level of detail.

Boulder Creek water meets federal safety standards, but chemicals including anti-depression, heart and hormone medication adds a new wrinkle to water quality control nationwide, USGS scientist Sheila Murphy said.

"There is little known what these chemicals do to humans or animals in small doses," said Murphy, co-author of the study.

Chemicals detected in Boulder Creek include metals found in mayonnaise, shampoo, water softeners and vitamin supplements. The study also found a spike of "gadolinium," a rare element that is injected into medical patients during magnetic resonance imaging exams or MRIs.

Murphy said little is known about galolinium. She said the results do not mean Boulder residents receive more MRIs than their counterparts across the nation.

"You would find the same results in a river downstream from any city," Murphy said, urging residents not to dump old medication or household cleaners in toilets or sinks.

Boulder Creek was chosen for the study because it allowed scientists to look at the water from protected mountain headwaters, through an urban region to an agricultural area.

The area studied includes 447 square miles that starts at the Continental Divide and goes to the plains north of Denver. Snowfall is the source of most of the water, though some also came from pipelines on the Western Slope.

Officials said they study can be used to draw up water quality policies.

"Good science is so important for policy makers to make good policy," Boulder Mayor Will Toor.

Boulder is studying the use of pesticides on noxious weeds near the creek, Toor said. The city also is looking at traces of animal feces in the river and whether the waste is from wildlife or domestic dogs.

Boulder households have responded to past water quality issues, said Chris Rudkin, Boulder water quality coordinator. The city found large levels of copper at its treatment plant a couple of years ago and traced it to a chemical used by homeowners to kill roots in water and sewer pipes.

"We got the word out and the stores that sold the product agreed to replace it with another product," Rudkin said.

On the Net:

USGS: <http://www.water.usgs.gov>

AP-WS-10-28-03 1848EST

Sent: Thursday, October 02, 2003 10:03 AM

Subject: UPDATE: MORE NEWS CONCERNING DRUGS IN WATER

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 contaminants 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.

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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.

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 8-foot 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 streams 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 repellent 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.

The chemicals detected were generally found in very low concentrations. But the government hasn't set 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.

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,

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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/[DHD Photo Gallery](#))

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 known 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 and 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 phthalates."

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>

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 pandemic. 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 traped 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

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"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 [Washington Post](#) 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.

Sent: Tuesday, December 16, 2003 7:30 PM

Subject: URGENT UPDATE: BOTTLED WATER POISONINGS ON RISE

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

On December 4, I sent you an email (and my unsettled heated opinion) concerning the recent tampering of bottled waters in Italy. Immediately below this message, the news states that the scare is growing and raising fears for copycat acts.

My kids and yours often buy bottled water when away from home. For their security inform them to turn the bottle upside down and squeeze. The slightest pressure will be enough to force water through any tiny hole made by a syringe needle...or any capacity to leak for that matter. You may also visit your local Authorized Aquathin Dealer and order Aquathin bottles for your kids to fill at home and have on the go. I love my Aquathin !

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

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Bottled Water - 12/15/2003 11:44:16 AM

Bottled water sabotage spreads in Italy

ROME — More people fell ill across Italy after drinking tainted bottled mineral water Dec. 13, the latest in a scare that has prompted prosecutors to launch investigations across the nation, The Associated Press said in an article reported by [MSNBC](#).

A series of apparent sabotages in which bottles of mineral water have been injected with household bleach just below the cap has taken the country by storm since the first reported case on Nov. 19. Reports of tainted water have multiplied, causing thousands of bottles of water to be pulled from shelves last week, the article said.

Italian hospitals have treated some 50 people for digestive tract irritation, though none of the cases has resulted in serious illness, the police reported. Authorities suspect criminal involvement in some of the earlier tampering, but they also say the Italian media focus on the cases may have encouraged "copycat" actions across the country, the news service stated.

In total, more than 500 cases have been reported, with most concentrated in Italy's north, officials said in the article.

----- Original Message -----

From: [AQUATHIN SALES & MARKETING](#)

To: Info@Aquathin.Com

Sent: Thursday, December 04, 2003 3:41 PM

Subject: BOTTLED WATER POISONINGS

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

Need another reason to own an Aquathin !?!and to "personally" produce purified water daily "in your own home" !?!

Having been associated in the bottled water business years ago, and now as many Aquathin Dealers are making their own bottled Aquathin water, I am sincerely upset over what you are about to read below. In spite of a world that seems to be getting wackier by the minute, 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... **ARE ALL FREE** services to all Authorized Aquathin Dealers and their clients to keep you abreast of technology updates and industry news.*

Bottled Water - 12/4/2003 12:34:08 PM

Police search for suspect in rash of bottled water poisonings

ROME – Some Italians suspect that a deranged criminal police have dubbed the "Unabomber," who has resorted to placing

explosives in consumer goods over the past several years, may be behind a recent bottled water poisoning scandal, according to a report by News24.com.

According to the report, several Northern Italians have taken ill from drinking mineral water that has been laced with detergent, and police believe the suspect has been using a syringe to inject the toxin into the water.

No one has died yet from the poisonings, although several have been hospitalized, according to the report.



Sent: Monday, October 20, 2003 2:46 PM

Subject: AMERICA'S [& THE WORLD'S] DRINKING WATER DILEMMA

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

Well, this most impressive article below is a bit longer than our standard informative "quick reads", and is extremely well detailed. But one thing is for certain....while anyone is looking to solve "this dilemma", Aquathin Customers already have !

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... ARE ALL FREE services to all Authorized Aquathin Dealers and their clients to keep you abreast of technology updates and industry news.

FROM WATER AND WASTEWATER NEWS BRIEF 10/20/03

America's Drinking Water Dilemma

Do Drinking Water Standards Really Protect the Public Health?

By Patrick J. Sullivan, PhD, Franklin J. Agardy, PhD and James J. J. Clark

In today's chemically dependent society, it has been undeniably demonstrated that America's drinking water contains numerous industrial chemicals, pesticides, pharmaceuticals and compounds from the water treatment process itself.^{1,2} Our primary defense against this chemical assault is the water industry's compliance with the Safe Drinking Water Act (SDWA) and Primary Drinking Water Standards. This defense, however, may not be adequate. Consumer confidence in the quality of it and our government's ability to effectively ensure the purity and safety of drinking water would appear to be at an all time low. This is evidenced by a growing trend in the number of lawsuits against water utilities. For example, in California there are 20 pending lawsuits, involving 2,200 plaintiffs and 123 defendants, that claim drinking water is unhealthy, even if it does meet government standards.³ Given this environment of eroded trust, should the American public continue to put faith in a regulatory policy (i.e., the use of drinking water standards) that is supposed to protect their health? And if there is any reasonable doubt about the effectiveness of these standards, what are the potential solutions?

Beyond A Reasonable Scientific Doubt

For a civil case in a court of law, the plaintiffs have the burden of proof. It will be almost impossible for any expert to establish beyond a reasonable scientific doubt that there is a causative link between

consuming drinking water that contains low levels of a pollutant(s) and a specific human illness. This is, in part, the direct result of not having actual chemical-specific information on the relationship between the exposure to known concentrations of chemical and human health effects. On the other hand, the water utilities are faced with the same dilemma in establishing that there is no harm. Unfortunately for the water industry, the plaintiffs have a reasonable argument simply because there are chemicals of concern in drinking water as a result of obvious flaws in the current application of standards to protect human health. It can be argued, therefore, that drinking water standards cannot be demonstrated to be protective of the public health for the following reasons:

1. Drinking water standards are not based on actual human exposure data to specific chemicals (i.e., except lead). Damage to human health has not and is unlikely to ever be calibrated to a specific chemical concentration in drinking water, nor can these standards be validated in the real world. In other words, it is currently impossible to collect human exposure data because the human environment is too complex, humans are often exposed to a large variety of potentially harmful substances and toxicity studies for the most part will not use humans in the place of laboratory animals.
2. Human risk assessment methods are nothing more than models that are not calibrated or validated using human exposure data. At best, they provide an educated guess of risk.
3. There is virtually no data on the toxicity of chemical mixtures on animals, let alone humans. Drinking water does not contain just one chemical pollutant.
4. The time period between the introduction of a chemical into the environment and when it is recognized as being toxic to humans or animals often spans decades. For example, trichloroethylene (TCE) has been used as an organic solvent since the 1920s. Because of its widespread use in industry, most aspects of TCE toxicity were established in the 1930s. Beginning in the late 1940s, TCE was identified as an environmental pollutant. By 1975, TCE was identified as a possible carcinogen. Even with this knowledge, it took until 1987, or almost 40 years, for USEPA to establish a final maximum contaminant level in water of 5.0 parts per billion (ppb). This example is typical of the time period needed for the federal government to make political decisions based on science. Such delays should not be surprising since the National Research Council estimates that there are approximately 72,000 organic chemicals in commerce within the United States, with nearly 2,000 new chemicals being added each year.⁴
5. The chemicals that are currently being regulated under the SDWA are the pollutants of the past. The most pressing problem is how to determine which chemicals represent the hazardous chemicals in drinking water of the present and the future. This is particularly true for a vast array of endocrine disrupting chemicals, chemicals that are suspected to disrupt the endocrine systems (glands and hormones) of humans and wildlife, and pharmaceuticals that have been identified in drinking water. Given the current pace of evaluating chemicals for inclusion to the Primary Drinking Water Standards, it is impossible for the EPA to identify and regulate the current number of chemicals already in the environment, let alone the approximately 2,000 new chemicals introduced each year. For example, as part of the 1996 SDWA amendments, EPA is now required to publish a list of contaminants that are not currently known or anticipated to occur in public water systems. This list, the 1998 Contaminant Candidate List (CCL), currently consists of 50 chemical contaminants. These contaminants include industrial solvents, metals, pesticides, explosives, rocket fuels, biocides and common elements, but no pharmaceuticals. The EPA is required to determine whether or not to regulate no less than five of the contaminants (but not all of the contaminants). Timing, as always, is the key. Because of the way in which the selection and implementation process is set up, a chemical that has been placed on the 1998

CCL that has been identified as a health threat might not be actually regulated by water utilities until 2013. This regulatory scheme cannot keep pace with the rate at which chemicals are introduced into the environment. If this was not bad enough, the National Research Council⁴ concluded that the methods used to select the CCL were flawed.

6. Drinking water standards are only partially based on science. The ultimate arbitrator is economics. The recent revision of the arsenic standard is a good example. In March 2001, President Bush's administration put on hold a planned reduction in the arsenic standard for drinking water from 50 ppb to 10 ppb. The administration then partially reversed itself and mandated that the 10-ppb standard be met no later than January 2006. The reason offered by the Bush administration for delaying implementation of the 10-ppb standard was the need to assure that this new standard was valid and affordable. This justification was based on politics, not science, given that epidemiologic data suggest that the standard should be zero⁵ coupled with the fact that no standard is truly valid for humans. Indeed, the government's maximum contaminant level goal is currently set at zero. The real and unspoken reason for the delay was its potential cost to the U.S. economy. Changes of this sort at both the federal and state level typify the capricious nature of setting water quality standards and cast doubt on the scientific validity of these modifications.

7. No consensus exists within the various federal programs as to which chemicals pose a threat in food and which should be regulated in drinking water. Furthermore, the toxic compounds regulated under the Clean Water Act are also different than what is regulated in drinking water. This is significant because, **the American Water Works Association reported in 2001 that, "...the boundaries between water and wastewater are already beginning to fade."**⁶

8. Given the potentially large number of chemicals that can be found in drinking water, it is impossible to monitor for specific unsuspected compounds. Thus, monitoring will only provide some undetermined level of assurance for those chemicals that have been selected as being a threat.

These arguments do suggest that there is reason to doubt the ability of drinking water standards to protect the American public. Clearly, the use of standards is behind the times, and from a practicable standpoint, incapable of adapting to a rapidly changing environment. This further suggests that a new method of protecting the public health should be considered.

A Need for a New Policy

In addition to all of these points, it must be remembered that by using standards, we allow pollutants to remain in drinking water. In other words, industry has a license to pollute. Thus, because the fundamental economics of industrial development in the United States are supported by governmental programs that allow chemical pollution of our water resources, and as since there is no current practical solution for controlling pharmaceutical and widespread non-point source pollution, it is virtually guaranteed that chemicals will always be in our drinking water. Therefore, from an objective viewpoint, the only way to achieve chemical-free drinking water is to remove chemical pollutants from drinking water to their lowest possible levels. This means switching from a standards-based approach to a technology-based policy that will actively protect the public health by removing both known regulated and unregulated chemical pollutants in our drinking water. This alternative is far superior to litigation.

As long as consumers have an awareness that pollutants are in drinking water and advanced technologies are available to treat water to the point where chemical pollution is minimized, there will always be the specter of litigation. However, some would recommend that this issue can be best resolved

by new federal legislation aimed at making standards the sole criteria against which to measure treatment performance. In other words, the public cannot litigate against water utilities unless water quality standards are exceeded. Such an approach assumes that standards are based on "good science" and ignores the fundamental problems with standard-based policies. The only logical solution for meeting our rapidly changing environment is to utilize a combination of the best advanced water treatment technologies (depending upon the needs of each water utility) to ensure that the maximum concentration of chemical pollutants is removed.

Advanced Water Treatment Technology

Advanced water treatment technology is not only available, but has been employed in the United States as well as in several European countries for years. Because these technologies are available, the simplest alternative to protecting the public health from the threat of chemical pollutants is for water utilities to voluntarily install the best available technologies to minimize chemical pollution in their product. If these technologies were employed, no change in governmental regulations would be required since all existing pollutant levels would be below existing drinking water standards.

Because each source of drinking water is unique, each individual water utility would need to assess the proper sequence of technologies to address the specific environmental characteristics of their water. Fortunately, there are a wide range of technologies available to address all forms of chemical pollution. For example, ion exchange has been employed for decades to remove both negatively and positively charged inorganic compounds from water. In a similar fashion, granulated activated carbon has been used since the 1920s to remove organic pollutants from both water and industrial processes. More recently, ozonation has been employed as a substitute for chlorine and bromine as a means for disinfection, but has also been used to oxidize organic constituents (which is widely used in Europe). Membrane separation technology (i.e., reverse osmosis, nanofiltration and microfiltration) is very effective at removing a wide range of organic and inorganic compounds from water. Even new pollutants such as methyl butyl ether, which is a gasoline additive found in more than 80 percent of reformulated gasoline, can be significantly reduced by the combination of ozonation and hydrogen peroxide. Furthermore, the use of continuous monitoring instrumentation has improved the efficiency of water treatment systems. Indeed, technologies do exist to remove chemical pollutants from our drinking water. Yet, in most regions of the United States, it is argued that they are not employed because of their cost. However, is cost an actual or perceived barrier to the implementation of advanced technologies?

The Cost of Employing Advanced Technology

When considering the cost of employing advanced water treatment technology, it must be evaluated in terms of both long-term and short-term applications. For example, one long-term solution would be to provide water treated by advanced technologies that are used only for drinking while providing a lesser quality water for landscaping, showers, toilets, laundry and firefighting. This would mean that only approximately 10 percent of domestic water use would have to be treated for drinking water purposes. Thus, the cost of treating drinking water would be significantly less, but would obviously require separate water distribution systems. Separate systems could be provided when the utility infrastructure is replaced or during new construction in planned communities.

Another approach, such as proposed by Walter Weber of Michigan State University⁷, would be the use of advanced water treatment technologies in a satellite mode. These highly advanced treatment systems would be employed at the neighborhood level to improve the quality of the water coming from the central water treatment plant. The objective of using such a system would be to provide the highest quality water to a limited but specialized consumer base (i.e., housing subdivisions, apartment complexes or commercial districts). This approach has merit since a satellite system installed at a point

of need would be much smaller and would require a much shorter length of parallel distribution. Professor Weber has written that "...potable water is of questionable quality...we're going to be facing the reality that water supply is, in fact, wastewater." Historically, the water industry has led the way in employing the best available technology to deliver quality water and once again the water industry has the advanced technology by which to achieve the highest level of water to the consumer. When one reflects on the fact that the latest cost projections for drinking water infrastructure needs range from \$11.6 billion per year to \$26.3 billion per year⁸, it not unreasonable to assume that a careful consideration of employment of advanced technologies system wide or in the satellite mode might prove to be more cost effective while achieving the higher goal of truly pollution-free water.

The best short-term solution is for the water utility industry to simply implement the use of advanced treatment technologies and avoid the potential cost of litigation, potential damages or costs associated with lobbying to change regulations. Given that the added cost to a water utility of implementing advanced treatment technologies has been estimated to be no more than 15 percent to 25 percent, some communities could voluntarily make the necessary upgrade without state or federal support and pass the added costs on to the consumer.⁹ This situation is a likely scenario. For example, as a result of the widespread pollution of drinking water by pesticides, some water utilities in the corn belt region of the United States have already upgraded water treatment facilities¹⁰ at increased costs to both the community and consumers. Furthermore, with the implementation of the Stage 2 Disinfection Rule, those community water systems that exceed the new standards will have to reduce the amount of dissolved organic carbon in the raw water, switch to a non-chlorine/bromine disinfection systems (e.g., use ultraviolet light) or install advanced treatment technologies. In those cases where some degree of advanced treatment technologies are implemented to comply with the Stage 2 Rule, the cost of the additional improvements needed to reach minimum pollution in drinking water should be marginal. Thus, for some water utilities the leap to providing a truly pollution-free drinking water to their customers is not that great. Ultimately, are water utilities capable of implementing the necessary technologies to attain drinking water that is close to pollution free as possible without state or federal funding support? The answer is yes, but are they willing to do it?

A simple exercise shows that the consumer resistance issue may not be as prohibitive as many assume. If an average family spends \$50 per month for water (which, is higher than what the majority of consumers pay monthly), and if one assumes that water treatment costs represent about 40 percent of the average cost of delivered water, then an increase of 20 percent for the implementation of advanced treatment technology results in a dollar increase of only \$4 per month or a total bill of \$54 dollars per month. This represents an increase of only eight percent -- a small price to pay for pollution-free water.

Treatment is the Only Solution

In the final analysis, safety can only be assured by refocusing our environmental policies on eliminating pollutants in our drinking water instead of limiting selected pollutant concentrations to modeled levels. To adopt such a policy, means switching from passive enforcement of pollution-based standards to actively removing pollutants predicated on technology-based water quality goals (i.e., maximum pollutant removal). Following this approach not only addresses the pollutants of the past but addresses the pollutants of the future in a manner that standards simply cannot do.

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