

Unreliability of Safe Drinking Water Act, the EPA & A Protecting/Harming Dialectic

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The U.S. Environmental Protection Agency (EPA) is charged with the mission of protecting human health and the environment. The EPA states that its mission is to further ensure that "national efforts to reduce environmental risk are based on the best available scientific information" and that, "federal laws protecting human health and the environment are enforced fairly and effectively." ⁱ Does the EPA rely on the scientific information available, and does the EPA enforce environmental laws fairly and effectively? While no variance calculations have been performed or presented on the matter, efforts have been exerted to weigh these questions both contextually, and situationally, with respect to the Safe Drinking Water Act, ⁱⁱ and the protections afforded to U.S. populations by way of it.

Background

Protecting the environment, and the people, from various risk of exposures is inherently a scientifically intensive activity. As an example, such activities are dependent heavily on interdisciplinary and multidisciplinary expertise in Biology, Chemistry, Ecology, Engineering, Economics, Mathematics, Management, Physics, Zoology, and specializations such as Atmospheric Chemistry and Ichthyology. ¹ Employing science in information gathering, analysis, representation, and in decision-making processes require the proportional use of scientific principles in those processes themselves; fully disclosing - types of information, identifying informational resources, and detailing informational associations that pertain holistically to evaluating, and acting upon the goal and/or the problem at hand. When we consider the role of the EPA as protector of the Environment and of the People; that the EPA is the federal agency with primacy over U.S. Waters; that the EPA is the majority enforcer of Safe Drinking Water Act provisions, ⁱⁱⁱ at the very least, we detect by Agency actions that the use of science in decision-making processes at the EPA - has largely not been a primary concern.

1 The study of fish

Norman Miller's assessment of EPA is at least partly able to represent the disorderly nature of EPA's existence. Miller says: "the EPA is not a scientific agency. It's principal charge is not to determine how best to attack environmental problems, or even which problems to attack, but to implement and enforce congress's mandates." ^{iv} While the EPA is staffed with numerous exceedingly dedicated and abundantly competent personnel, the agency is structurally wrought with bureaucratic disconnections among many layers, and is decidedly prone to the countless external influences that are exerted upon it. In 2004, 52 Nobel laureates, 63 National Medal of Science recipients, and 195 members of the National Academies, who are leading experts in Medicine, former Federal Agency Directors, University Chairs and Presidents, joined the Union of Concerned Scientists (UCS) to express their contempt for the abuse and misuse of science in aspects of critical decision-making in the carriage of Government functions, highlighting activities at EPA, which has left American men, women and children defenseless. ^v

Wholly, with respect to consumable waters in the U.S., it has been made explicit in the past that issues related to Drinking Water conditions, directly, and indirectly, cannot improve - unless the United States government undertakes proper actions to develop and deploy a comprehensive science based National Security Strategy for U.S. Waters. ^{vi} U.S. Government policy regarding the assurance, maintenance and preservation of water resources for human needs and consumption, has floundered for a century or more. ^{vii} For example, in the here and now, Lake Mead has been the irrigational source for 2 million acres of crops in the U.S and Mexico, source of industrial and drinking water for over 20 million users, and the supplier of nearly 2,080 MW of electrical energy per year to 1.3 million people in Arizona, Nevada and California. ² As it stands, we have no comprehensive means to assure that catastrophic reduction in U.S. water sources *will not* dramatically impede agricultural and livestock related outputs, U.S. drinking water needs, and among other things -- assuring sources of water for various aspects of electric power production. The availability and the usability of water are not only essential to sustain all biological life but, all human lifestyle as well.

The Protecting/Harming Dialectic...

The term *dialectic* here - infers to the continued existence of a public argumentation. It refers to indiscernible arguments between public sides one which purports that the EPA protects, and the other which suggests that the EPA does not. "A thing cannot be at the same time both true and false," ^{viii} so says a Chinese proverb. For that reason, the nature of offense and of delinquency, associated with the EPA's continued unabashed claim of using science, and protecting the environment and the people cannot be understood well without a sample

2 U.S. Bureau of Reclamation/U.S. Department of the Interior and Southern Nevada Water Authority (SNWA)

examination of events within view of EPA actions, or inactions. Conversely, to understand the variety of governmental dysfunctionality that so often prevail, we must consider the operational coziness between the regulator - in this case the EPA - and those that are to be regulated, to even modestly fathom the regulator's reluctance to regulate. The EPA's reluctance to regulate is quite often and closely accompanied by an authoritarian, condescending, cunning, and a self-important style of reasoning, intended to squelch public criticism. Herein, through 3 diverse cases, the nature of regulatory troubles in relationship to the *Safe Drinking Water Act of 1974*, and as amended since, will be shown.

Case 1: Shortly after midnight on 22 December 2008, in Kingston, Tennessee, the otherwise still of night was broken by the sight and sound of what residents could initially identify only as a giant mudslide. What transpired during the dead of that one night was more baleful than any mere mudslide. A dam, owned by the Tennessee Valley Authority (TVA) had failed, spilling approximately 5.4 million cubic yards of coal-ash ³ (also referred to as fly-ash, or Coal Combustible Wastes (CCW)) into the Emory River, and subsequently into the Clinch and Tennessee Rivers. The rupture of the fly-ash containment wall released approximately 978,000,000 gallons of what TVA claimed to be *inert* ^{ix} by product of coal fired power generation - than the *toxic sludge*, ⁴ which it was, flowing forcefully - to displace homes from their foundations, and people's lives.



The Kingston Plant has been depositing and storing Coal Ash in holding ponds on site, just adjacent to the Emory River, since the 1950's. Reporting on the accident, the Tennessee Valley Authority's (TVA) Office of Inspector General (OIG), seared TVA management for ignoring - directly communicated "*red flags*" from multiple parties, spanning a period in excess of 20 years, which pointed to dangers at the Kingston ash storage facility. ^x In the report, the OIG chastised TVA management for propagating an organizational strategy, and a management practice that plainly *schooled* TVA employees in the fine art of public communications and

3 Waste by-product of coal burning fossil-fuel power plant

4 See analyzed contents of Coal Ash in the next paragraph

information release, both, intended to assist the *cover-up* – of TVA’ culpability in the incident and *avoid* legal liabilities. Also according to TVA-OIG, during the disaster analysis phase, TVA, severely, and intentionally, limited the scope of work by TVA’s Accident Root Cause Analyst AECOM, and discouraged both AECOM and its representatives “*from disclosing information to the public that was relevant and necessary for the analysis of the safety of the remaining Kingston ash ponds and other TVA ash ponds.*”^{xi} After the Kingston Coal Ash spill, surface water in the Emory River was determined to contain Aluminum, Antimony, Arsenic, Barium, Beryllium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Thallium, and Vanadium. Surface water in the Clinch River was determined to contain Aluminum, Antimony, Arsenic, Barium, Beryllium, Cobalt, Iron, Lead, Manganese, Thallium, and Vanadium. Also, Antimony, Iron, Manganese, and Mercury were found in Tennessee River water, which is a source of drinking water for Nashville, Tennessee. Lastly, fish exposed to waters contaminated by the Kingston spill had contained Arsenic, Lead, and Mercury.^{xii}

Analysis: The EPA’s mandate is to enforce all U.S. environmental laws. The TVA case, which the OIG called “one of the largest environmental disasters in U.S. history,”^{xiii} is revealing of certain types EPA’s enforcement challenges. The rupture of the TVA Kingston Coal-Ash dam, and the activities and the events leading-up to it, unfolded while the U.S. Environmental Protection Agency stood watch over the protection of our environment. The TVA case exemplifies: types of legal, monitoring and enforcement complexities surrounding pollution events; the need for EPA sophistication and astuteness to monitor and evaluate pollution cases; how polluters manage their organizations and attempt to manage and control information releases on pollution events; and how polluter subterfuge sidestep scrutiny from regulatory agencies.

Volumes can be written on efforts to regulate Coal Combustible Wastes (CCWs). After October 21, 1980, when Congress passed the Solid Waste Disposal Act,^{xiv} included within was the Bevill⁵ amendment,^{xv} which amended the Resource Conservation and Recovery Act (RCRA), and exempted CCWs from being treated as hazardous wastes in advance of EPA conducting proper studies and assessments. This is as it should be. Since the passing of the Solid Waste Disposal Act, the EPA has performed numerous assessments of CCWs, pursuant to the Bevill amendment, also integrating public comments. In the year 2000, within an EPA pre-determination notice on CCW,^{xvi} then EPA Administrator Carol Browner seemingly recognized the CCW threat, stating: “[g]iven the huge volume⁶ of coal combustion wastes generated nationwide and the numbers of facilities^{xvii} that currently lack some basic environmental

5 So named after Representative Tom Bevill of Alabama

6 134,699,739 Short Tons of Coal Combustion Waste is generated each year (2009) according the American Coal Ash Association [This translates to 122,199,603.221 Metric Tonnes – World Coal Institute]

controls, especially groundwater monitoring, there is at least a substantial likelihood that other cases of proven and potential damage exist.” Administrator Browner further stated in the same pre-determination that, “[p]ublic comments and other analyses . . . have convinced EPA that these wastes can, and do, pose significant risks to human health and the environment when not properly managed, and there is sufficient evidence that adequate controls may not be in place for a significant number of facilities. This, in our view, justifies the development of tailored regulations under [the hazardous] Subtitle C, of RCRA.”^{xviii}

Separately, there is a need to take into account the results of a long-term groundwater monitoring effort⁷ of the Wabash Valley Aquifer (WVA) by Purdue University, as they are surely telling.^{xix} Purdue’s objective was to understand what the long term effects of storing a monthly average of 32,000 metric tonnes of Coal near the University's Wade Utility Plant would be - on Groundwaters - among other factors. Results of this long term monitoring effort identified Pb contamination of the WVA, at concentrations greater than the State’s Maximum Contaminant Level. Further, analysis of retention pond sediments showed the highest concentrations of Be, Cd, Cu, Pb, Ni, Se and Zn in aquatic sediments - ever reported within the State of Indiana.^{xx} More to the point, and for EPA’s benefit, it must be noted that in at least one specific study where “*In vitro* genotoxicity of fly ash leachate” on a biological organism was studied -- significant genotoxicity was evident, where the lowest tested concentration of leachate at 6.25% - produced significant DNA damage.^{xxi} In another study, where “[m]utagenicity and genotoxicity of coal fly ash water leachate” (*In vitro*) was also studied, high mutagenicity and genotoxicity were recorded; causing the authors to spell-out that fly-ash dump-sites [wherever they may be] have high genotoxic and mutagenic potential to adversely affect vegetation, and human populations.^{xxii}

With that in mind, one must focus upon the following -- not well publicized fact. With the blessing of the EPA, and the State of Tennessee, approximately 4 million metric tonnes of TVA’s Kingston Coal Ash was transported across states lines from Tennessee, to the Arrowhead Landfill, in Perry County – Alabama.^{xxiii} There, against the wishes of community residents, the Coal Ash is now buried in a landfill, which was originally designated as a household waste landfill.^{xxiv} Meanwhile, Tennessee’s Commissioner of the Department of Environment and Conservation has communicated to the EPA Administrator, the State’s support for a continuation of the CCW exemption from hazardous waste classification.^{xxv} Finally, the EPA has documented and validated evidence in at least 27 cases of proven damages to surface and groundwater sources from CCW leachate contamination, and 40 cases of potential damage associated with CCW.^{xxvi} Proven damage in these cases involves instances where *clear*

7 Monthly monitoring for 34 months

evidence of Maximum Contaminant Level (MCL) exceedances have occurred.^{xxvii} Collection of sediment samples as of late, in downstream waters away from TVA Kingston spill site have indicated levels of Arsenic at 2000 parts per billion.^{xxviii} EPA designated Arsenic MCL for safe drinking water is 10 parts per billion. Yet, Coal Combustible Wastes remain unregulated, today.

Case 2: In a Communiqué issued on April 9, 2008, by the Committee on Oversight and Government Reform of the U.S. House of Representatives, to then EPA Administrator Stephen L. Johnson, Committee Chairman Henry Waxman expressed extreme concerns regarding an EPA proposal to issue variances to water system operators in small American communities, stating that issuing such exemptions would “significantly weaken the *public health protections* provided by the Safe Drinking Water Act.”^{xxix} The Safe Drinking Water Act^{xxx} mandates that EPA identify affordable technologies, and assist public water systems serving small communities - such that they are able to comply with national drinking water standards. And accordingly, the EPA had determined that “affordable compliance technologies are available for every drinking water regulation.”^{xxxi} In spite of this, the EPA forwarded a proposal to issue variances to small public water systems that would intentionally weaken public health protections.

Much in advance of this proposal by the EPA, on the matter of issuing waivers to Small Community Water Systems, the EPA’s Science Advisory Board^{xxxii} and the National Drinking Water Advisory Council,^{xxxiii} conveyed recommendations to EPA’s Administrative layers. However, sensible recommendations, such as one from the Science Advisory Board, which explicitly suggested the “*Agency should consider options of system consolidation,*”⁸ to ensure affordability and SDWA compliance were ignored. Instead, the EPA seem to embark on a path that would lead to contravening the basic precept of ‘*Protecting Public Health,*’ pit itself against the prospect of nullifying the inviolability of the *Maximum Contaminant Level* (MCL) definition, and all MCL related enforceability by the EPA.

Analysis: In its Communiqué, the Committee on Oversight and Government Reform notes that “[s]ince the Safe Drinking Water Act was enacted in 1974, EPA has set a maximum contaminant level (MCL) for regulated drinking water contaminants.”^{xxxiv} This Committee declaration is technically factual. However, there are untold numbers of “unregulated” contaminants in drinking water today. *Unregulated*, and untreated contaminants that have been determined to be present in U.S. waters include natural and synthetic hormones, detergent metabolites, fire retardants, insecticides, plasticizers, human and veterinary drugs, and Organic Wastewater Contaminants (OWC). In a landmark study performed by the U.S. Geological Survey,^{xxxv} 80 percent of U.S. sampled streams, and 93 percent of sampled groundwater sources were

8 Not merely a cobbling together of ill-suited entities by fiat

determined to have been contaminated.^{xxxvi} The SDWA, as it was initially enacted, required water systems across the country to focus upon the treatment of waters to ensure safety. As it is described by the EPA, the 1996 Amendment of SDWA is aimed more at “preventing contamination problems through source water protection and enhanced water system management.”^{xxxvii} The SDWA Amendment does nothing to restrict the flow of unregulated contaminants or pollutants into U.S. waters.

The amended law (SDWA) required the EPA to take into consideration *small community water system deployable technology affordability*⁹ characteristics, versus, benefit to be derived by deploying those affordable technologies for public health protections; hence the variance proposal. Within that context, in its Communiqué, the Committee on Oversight and Government Reform noted: “[b]y statutory definition, *variance technologies may remove less contamination than the best available technologies and may not achieve the MCL* but are still required to be protective of public health.”^{10 xxxviii} As the Committee has fittingly made visible, in the employment of variance technologies, Water Systems are permitted to remove less contamination, and are also permitted to exceed - Maximum Contaminant Level requirements as established by the EPA. However, the same Water Systems are “required” to be “*protective of public health,*” still. By definition,¹¹ the EPA has determined that the MCL should not be exceeded - if public health is to be assured and preserved. Yet, as the Committee acknowledges in its communication, the EPA has managed to subtly invalidate the core meaning, and the very foundations of the MCL.

It is not obvious to this author as to how one can beneficially reconcile the fundamental error in having committed enormous national taxpayer monies and time, among other things, toward developing MCLs for contaminants in water -- only to have *affordability waivers* issued, whereby Water Systems can legally circumvent standards, and supply communities with contaminant laced waters, at levels beyond the EPA’ established thresholds for harmful substances. If Water Systems are expected to exceed MCLs by way of a variance, yet the same Water Systems are expected to be “*protective of public health,*” the definition of a “Maximum Contaminant Level” will have unquestionably been befouled as well.

The artifice inherent to this *Potomac Two-Step* is the slyly packaged anencephalous proposition from the EPA, to qualify, and to officially deem variances granted to Water Systems to be *protective of public health,* “if the concentration of the target contaminant after treatment by

9 A congressional legislative criteria

10 Emphasis not in the original

11 “Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.” Source: “National Primary Drinking Water Regulations,” U.S. EPA: <http://water.epa.gov/drink/contaminants/index.cfm>

the variance technology is no more than *three times the MCL.*"^{xxxix} Said differently, the EPA proposition stated -- so long as the Water System receiving the EPA variance would not exceed three times (3x) the established Maximum Contaminant Level for "a" contaminant -- after treatment, the EPA would in essence rubber-stamp such exceedances of MCL levels as having satisfied the criteria of Water Systems needing to be *protective of public health*. It follows then that such monkeyshines represent a government agency's brainy attempt to effectively enforce environmental laws, and use science to protect U.S. populations.

Case 3: The following case demonstrates - how the introduction of a chemical - into what was thought to be a select environment, can prove to a multi-pronged, multi-venue problem. "Two-thirds of the world's crops depend on insects for pollination."^{xi} In the U.S., up to 30% of the food and beverages we consume are produced through the work of pollinators.^{xii} We know that the honey bee represents a significant and essential asset to the sustainment of many key crops. In the United States alone, the value of crops pollinated specifically by the honey bee, is estimated to be as high as US\$14 billion/yr.^{xiii} Given the highly symbiotic existence man and bees have enjoyed since ancient times,¹² it may prove wondrous for many to learn that activities of man are now contributing the decline of bee populations, and significantly in recent years. In the U.S., evidence has recently surfaced^{xliii} that the decline in populations of pollinators can at least in part be linked to a sanction -- granting authority to use, the request for which, the EPA once reviewed and approved, and has since maintained. This sanction - granting authority to use - covers the manufacture and sale of a pesticide known as Clothianidin. Ostensibly at the outset, Clothianidin was conclusively determined by the EPA's own scientists to not only be harmful to bee populations, but also that it was highly mobile, and that it would leach to groundwater, and be transported via runoff to surface waters.^{xliv}

Analysis: In a 2003 EPA issued fact sheet to accompany the conditional registration of the use of the pesticide Clothianidin - manufactured by Bayer CropScience, the EPA's officials acknowledged that "Clothianidin has the potential for toxic chronic exposure to honey bees, as well as other non-target pollinators, through the translocation of Clothianidin residues in nectar and pollen."^{xlv} In 2005, as part of a wider use request review for Clothianidin by the EPA, Scientists at the agency - transmitted an urgent cautionary warning against the use of Clothianidin in circumstances, where bees could potentially be exposed to the pesticide. They said: "Clothianidin's major risk concern is to nontarget insects (that is, honey bees). EFED¹³ expects adverse effects to bees if Clothianidin is allowed to be sprayed on blooming, pollen-shedding, or nectar producing parts of plants. Because of this, EFED is recommending bee

12 Archeological evidence of honey gathering during the Neolithic age has been found, Bicorp – Spain, 7000 – 4000 B.C.

13 Environmental Fate and Effects Division (EPA)

precautionary labeling prohibiting such Clothianidin applications." ^{xlvi} During this time, Clothianidin use continued, and U.S. bee populations were tumbling. ^{xlvii}

Meanwhile, due to the risk to bee populations, Germany, France, Italy and Slovenia banned the use of Clothianidin. Bayer CropScience filed yet another expanded use request for Clothianidin. This time, EPA Scientists issued a four alarm alert regarding Clothianidin and its effect on bees, saying, "Acute toxicity studies to honey bees show that Clothianidin is highly toxic on both a contact and an oral basis." And "[a]lthough EFED does not conduct RQ based risk assessments on non-target insects, [available] information suggest the potential for long term toxic risk to honey bees and other beneficial insects." ^{xlviii} Responding to Clothianidin bans in Germany, France, Italy and Slovenia, EPA's response said, "[t]o EPA's knowledge, none of the incidents that led to suspensions have been associated with Colony Collapse Disorder." While technically, this is factual, the EPA has refused to acknowledge the risk Clothianidin poses to pollinators, or to U.S. waters, as made explicit by EPA's own Scientists. Clothianidin use continues today.

Summation: Each year in the United States, water utilities are required to dispatch a *water quality report* to their customers. ^{xlix} This report from the water utility is intended to inform customers of contaminants present in their drinking water. Do these reports give the consumer a complete picture? The answer is: *certainly not*. The United States Supreme Court, in *Richmond Newspapers, Inc. v. Virginia*, once asserted, "[p]eople in an open society do not demand infallibility from their institutions, but it is difficult for them to accept what they are prohibited from observing." ^l So, what are the American people prohibited from seeing?

At present, some 91 drinking water contaminants are being regulated by the U.S. EPA, and over 1500 Chemicals have been identified by the agency for further screening. However, the 1500+ Chemicals that the EPA has identified, represents a small fraction of what are now - more than 84,000 chemical substances in the EPA' Toxic Substance Control Act - Chemical Substance Inventory. Each of these 84,000 chemical substances now represents - an exposure risk vector to human beings.

The question, to what extent, and to what severity, human populations are at risk from contaminants in U.S. Waters - remains unanswered. The reason for this is that the EPA has been moving at a remarkably glacial pace on matters related to testing substances, contained within - what seems to be an almost boundless chemical substance Inventory. Moreover, as the Congressional Research Service has noted, the EPA's funding authority for such things as testing - through the Safe Drinking Water Act programs "expired in FY2003, Congress [nonetheless] continues to *appropriate funds* annually for these programs." ^{li} This implausibly fractured state of existence represents the current state of planning and execution of those

measures intended to protect U.S. water resources, and protect the American public from harmful exposures to various contaminants in the water they drink, and in natural bodies of water to which they are otherwise exposed. As yet, no comprehensive plan exists to secure, and to assure, American water sources to meet national needs.^{lii} None are expected in the near future.

For the EPA, the task of protecting the environment and human health has represented a broad operational field with significant depth. For that reason, to satisfy the administrative, compliance, and enforcement related rigors, the EPA possess broad operational powers to assert potency - allied to tasks. However, as cases within this monogram illustrate, operationally, the EPA has been grossly insufficient. Yet, the prospect of the EPA's complete dissolution is unthinkable. On the other hand, the American people cannot, and should not, expect the EPA to ably meet widening environmental challenges we now routinely confront - in its present state and structure.

For example, Coal is the United State's most abundant fossil-fuel energy resource. Our reliance on Coal is therefore, understandable, as a matter of satisfying national energy needs. The important question for U.S. scientists at least, with respect to the use of Coal as a national resource is: how can the *intelliuse*,¹⁴ of Coal be made practically feasible - without the environmental impact - that we are made to endure today? Such a question - is at least in part - directly connected to our national will to fund novel approaches that aid and advance goals toward energy independence. Then again, instead of initiating and sustaining national level funding of foresightful approaches toward achieving U.S. energy independence, our political actions have continually been to "kick the can - down the road." Now, given the state of national economies worldwide, there is a lesser prospect of employing such measures for the foreseeable future. With respect to negative environmental and human health effects associated with Coal use in energy generation, this author believes that the American people do not expect the EPA to be infallible.^{liii} The citizens of these United States do expect the EPA to be non-hypocritical, to be accountable, and be mission centered in agency actions. Where there has been a radical need to mitigate the environmental effects of Coal use in energy generation, the EPA has been complicit in diminishing agency mission effectiveness, and has at a minimum, perceptibly delayed vital agency action - in the face of harm to the environment and human health.

The EPA's action-history is replete with timelines involving capricious, shiftless and feckless actions, indicating protection of the environment, and of human health, to be secondary to the appeasement of those who assert political influence. As an agency, the EPA is in dire need of

14 Intelligent use

penetrating transformation. Any attempt to rehabilitate the EPA will unquestionably require a most thorough assessment and analysis. *The agency is clearly understaffed by scientists, and is programmatically underfunded also; a longstanding political ploy of U.S. Congress.* Among the various aspects of the EPA that will need attention are the EPA Congressional and Legislative Affairs, and the Office of General Counsel, both of whom could benefit from the assignment of specific expertise, and complementing authorities to emphasize, de-conflict, synergize and effectuate EPA mandates and missions. ^{liv}

Therefore, the *raison d'être* for this article is to serve and to advantage the assemblage of rational energies within the inquisitive mind, to potentiate reason, as the role of science and scientists related to the protection of the environment and of human health remains sizeable. The author wishes to express optimism that logical scientists everywhere will be able to renew their personal and professional commitment to the restoration of scientific integrity into public policy decisioning processes. The Scientific Community, and indeed the people of these United States, have yet to recover from the large-scale dampening of critical thinkers in our time. In matters vital to national interests, such as the health of our populations, and the health of the environment -- policy institutions and policy-makers within have long been sepulchered in an atmosphere bereft of civility, reason, clarity, and openness, in the presentation and discussion of facts, and in key processes of decision-making. There is an urgent need to fully reverse this situation. As it stands presently with the EPA, it is true to the aphorism, "with such friends, one doesn't need enemies anymore." It remains unclear, whether U.S. population need protecting from contaminants abound in drinking waters, or from a Government agency that understands neither it's role, nor it's function, as protector, and as the people's enforcement agent against polluters.

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- xv U.S. Code, Title 42 – The Public Health and Welfare, Chapter 82 – Solid Waste Disposal, Sub-Chapter III – Hazardous Waste Management; Sec. 6921 – Identification and Listing of Hazardous Waste [42 U.S.C. §§ 6921(b)(3)(A), (c)6982(n)]
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