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Texas argues that Supreme Court Ruling nullifies NRC's authority to license the interim spent nuclear fuel facility in Texas

The Supreme Court on June 30 ruled against the Environmental Protection Agency's authority in *West Virginia v. EPA*, deciding that the EPA's effort to regulate greenhouse gases by making industry-wide changes violated the "major-questions" doctrine. ¹ If Congress wants to give an administrative agency the power to make "decisions of vast economic and political significance," then Congress must make legislation to clearly say so.

Whether or not you agree with the Supreme Court's decision, the decision may have ramifications beyond the Environmental Protection Agency and the Clean Air Act.

The State of Texas Attorney General has argued that the Nuclear Regulatory Commission (NRC) decision to license the interim spent nuclear fuel facility proposed for Andrews, Texas, lacks legislation backing from Congress.

Texas Attorney General Ken Paxton has argued that NRC lacks the authority to license the interim spent nuclear fuel facility proposed for Andrews, Texas because the action violates the Nuclear Waste Policy Act and the National Environmental Policy Act.

The NRC has claimed that it could license a private company to operate the facility even though federal legislation prohibited the federal government from operating such a facility.

The *West Virginia v. EPA* decision could nullify the U.S. Nuclear Regulatory Commission's authority to issue a license to a private company to operate an interim storage facility for spent nuclear fuel.²

The Supreme Court decision upholds a legal theory known as "major questions doctrine" that holds that Congress must authorize federal agencies' decisions on issues of major political or economic significance.

The proposed interim spent nuclear facility in Texas would store around 40,000 tons of spent fuel. The NRC licensed the site to operate for 40 years. However, with no permanent disposal site available, the spent nuclear fuel transported to Texas would have no place to go. 3

¹ Amy Howe, Scotusblog.com, "Supreme Court curtails EPA's authority to fight climate change," June 30, 2022. <u>https://www.scotusblog.com/2022/06/supreme-court-curtails-epas-authority-to-fight-climate-change/</u>

² Benjamin S. Weiss, *Exchange Monitor*, "SCOTUS EPA ruling means NRC can't license temp storage of spent nuclear fuel, Texas says," July 7, 2022.

The NRC required the spent fuel canisters it licensed to allow discharging the spent fuel from the canister. This transfer of spent fuel from a storage canister would be needed if the canister were damaged or misloaded or if disposal requirements required disposal in a canister designed for disposal. However, decades after beginning to use these canisters, there has been no way developed to allow the fuel to be removed from a canister. So, a damaged canister cannot be repaired and the fuel in a degraded canister cannot be removed. Spent fuel canisters are susceptible to chloride-induced stress corrosion cracking and through-wall cracking may make cracks in the canister within two decades. ⁴

New Mexico Governor vows that interim spent nuclear fuel will not be allowed in the state

The U.S. Nuclear Regulatory Commission has recommended issuing a license to the proposed Holtec interim spent fuel storage facility in New Mexico. ⁵ The facility could store as much as 100,000 metric tons of spent fuel. ⁶

New Mexico Gov. Michelle Lujan Grisham has vowed that New Mexico will not become "a dumping ground for the nation's spent nuclear fuel."

Just like the proposed interim storage proposed for Texas, spent nuclear fuel shipped to New Mexico would be sitting in aging canisters that cannot be repaired or replaced. The NRC license could expire, yet the spent fuel would have no place to go. And likely would not even be safe to transport in the aging canisters.

The interim storage would be likely be licensed for 40 years, with extensions of the license to be granted by the NRC. However, there is no permanent spent nuclear fuel disposal facility in existence. And the Department of Energy does not even have a program for developing a permanent spent nuclear fuel disposal facility. So-called "interim" storage may be for hundreds of years, or forever, and will be susceptible to canister leakage and the airborne release of radionuclides. ⁷

The Department of Energy has studied burial of the spent fuel in New Mexico and in south Texas. The large canisters licensed by the NRC have never been approved for disposal. No

³ See the November 2018 and August 2017 Environmental Defense Institute website newsletters regarding proposed interim spent fuel storage near Andrews, Texas at <u>http://www.environmental-defense-institute.org/publications/</u>

⁴ See the January 2021, December 2020, February 2019 and January 2019 Environmental Defense Institute website newsletters regarding spent nuclear fuel canisters and their disposal at <u>http://www.environmental-defenseinstitute.org/publications/</u>

⁵ *Nuclear Newswire*, "New Mexico governor vows that state will not accept spent fuel," July 18, 2022. <u>https://www.ans.org/news/article-4134/new-mexico-governor-vows-that-state-will-not-accept-spent-fuel/</u>

⁶ See the June 2021, October 2020 and September 2020 Environmental Defense Institute website newsletters regarding the proposed Holtec interim spent nuclear fuel facility for New Mexico at <u>http://www.environmentaldefense-institute.org/publications/</u>

⁷ See the March 2022, December 2020 and January 2019 Environmental Defense Institute website newsletters regarding Yucca Mountain and spent nuclear fuel canister disposal issues at <u>http://www.environmental-defenseinstitute.org/publications/</u>

repackaging facility has been designed and no method for repackaging the fuel in these canisters has ever been developed. The higher enrichment and higher burnup fuels being used in U.S. nuclear power plants has increased the difficulty of safe storage and of disposal of the spent fuel.

In the last decade, there's been a lot of focus in the Department of Energy's spent fuel disposal research on disposal in a salt medium. ^{8 9} One problem is that direct disposal of high burnup spent fuel is prone to criticality.

The NRC has never bothered to worry about the increased difficulty of spent nuclear fuel disposal or transportation and storage, as it approved higher enriched nuclear fuels. The NRC never worries about the enormous cost of storing and disposing of spent nuclear fuel which are untold billions of dollars.

The NRC, however, did cancel the only well-designed epidemiological study proposed for the U.S., and only because they didn't like that it would cost \$8 million dollars. ¹⁰

Department of Energy Announces Decision to Select INL as the location to build the Versatile Test Reactor

On July 27, the Department of Energy announced that it is issuing a Record of Decision (ROD) for the *Final Versatile Test Reactor Environmental Impact Statement* (Final VTR EIS) (DOE/EIS-0542). The VTR will be a very unsafe sodium-cooled, fast-neutron-spectrum test reactor that will waste an enormous amount of money and create an enormous amount of radioactive waste while never providing any solutions to tackling the climate crisis.

In accordance with the National Environmental Policy Act (NEPA), DOE prepared the Final VTR EIS to evaluate the potential environmental impacts of alternatives for constructing and operating a VTR and the associated facilities required for post-irradiation examination of test and experimental fuels and materials. The Final VTR EIS also evaluates the potential environmental impacts of options for VTR driver fuel (i.e., the fuel that powers the reactor) production and the management of spent nuclear fuel from the VTR.

DOE has decided to implement its Preferred Alternative, the INL VTR Alternative, as described in the Final VTR EIS. The INL VTR Alternative is to construct and operate the VTR at the Idaho National Laboratory (INL) Site, and to establish, through modification and construction, co-located facilities for post-irradiation examination of test products and for management of spent VTR driver fuel. As demonstrated in the Final VTR EIS, implementation of the INL VTR Alternative would have small environmental consequences.

⁸ Henrik Lijenfeldt et al., Spent Fuel and Waste Science and Technology, Summary of Investigations on Technical Feasibility of Direct Disposal of Dual Purpose Canisters, SFWD-SFWST-2017-000045, September 2017. <u>https://info.ornl.gov/sites/publications/Files/Pub102524.pdf</u>

⁹ Energy Workshops, 2018 SFWST Annual Working Group Meeting, Las Vegas, Nevada May 22 to May 24, 2018. https://energyworkshops.sandia.gov/nuclear/2018-sfwst-rd-team-meeting/ See presentation number 68 and others.

¹⁰ See the January 2020 and October 2015 Environmental Defense Institute website newsletters regarding NRC refusal to fund valid epidemiology in the U.S. at <u>http://www.environmental-defense-institute.org/publications/</u>

At this time, DOE has not decided whether to establish VTR driver fuel production capabilities for feedstock preparation and fuel fabrication at the INL Site, the Savannah River Site, or a combination of the two sites. As always, the DOE wants to poison as many workers and communities as it can. Once a preferred alternative or option for VTR driver fuel production is identified, DOE will announce its preference in a *Federal Register* notice. DOE will then publish a ROD no sooner than 30 days after its announcement of a preferred alternative/option for VTR driver fuel production.

The VTR ROD and Final VTR EIS are available for viewing or download at <u>https://www.energy.gov/nepa/nepa-documents</u> and <u>https://www.energy.gov/ne/nuclear-reactor-technologies/versatile-test-reactor</u>.

The Versatile Test Reactor will be prone to cause catastrophic accidents which would contaminate southeast Idaho forever. Read more about the enormously expensive and too tardy to help climate change Versatile Test Reactor, which only uses electricity and does not generate electricity, in Environmental Defense Institute's newsletters and comment submittals.^{11 12}

Santa Susanna Field Laboratory and all its problems are similar to Idaho National Laboratory's problems

The former nuclear reactor research laboratory in California, the Santa Susana Field Laboratory was in the news in 2018 because of the Woolsey fire. Radiological contamination was spread by the fire, despite authorities claiming otherwise. Soil sampling conducted by Dr. Marco Kaltofen and Arnie and Maggie Gundersen and published in 2021 showed that the fire had spread radioactive particles from the Santa Susana site to communities. ¹³

An excellent article by Daniel Hirsch in 2019 describes the failures of the Department of Energy, the Environmental Protection Agency and California State agencies to protect workers and the community from the Department of Energy's Santa Susana nuclear site. ¹⁴ This is an

¹³ Dr. Marco Kaltofen, Arnie Gundersen and Maggie Gundersen, *Journal of Environmental Radioactivity*, "Radioactive microparticles related to the Woolsey Fire in Simi Valley, CA," October 8, 2021. <u>https://doi.org/10.1016/j.jenvrad.2021.106755</u> or <u>https://www.sciencedirect.com/science/article/abs/pii/S0265931X21002277?dgcid=coauthor</u> (See <u>https://www.fairewinds.org/demystify/woolsey-fire-data for more information.</u>)

¹¹ See the August 2021, March 2021, February 2021 and January 2021 Environmental Defense Institute website newsletters regarding the Versatile Test Reactor at <u>http://www.environmental-defense-institute.org/publications/</u>

¹² See Versatile Test Reactor (VTR) draft Environmental Impact Statement comments on our home page at <u>http://www.environmental-defense-institute.org/publications/EDI.Com.VTR.6.pdf</u> and <u>http://www.environmental-defense-institute.org/publications/CommentVTRdEIS.pdf</u> and <u>http://www.environmental-defense-institute.org/publications/CommentVTRdEIS.pdf</u> and <u>http://www.environmental-defense-institute.org/publications/CommentVTRdEIS.pdf</u>)

¹⁴ Daniel Hirsch, Bulletin of the Atomic Scientists, "A failure of governmental candor: The fire at the contaminated Santa Susana Field Laboratory," February 21, 2019. <u>https://thebulletin.org/2019/02/a-failure-of-governmentalcandor-the-fire-at-the-contaminated-santa-susana-field-laboratory/</u>

important article to read, as it reveals problems that are typical at many DOE sites including the Idaho National Laboratory.

Reading about the radioactive contamination, the inadequate environmental monitoring, the lack of meaningful cleanup and the cancers in nearby communities reminded me of how similar the Department of Energy's Santa Susana nuclear laboratory is to the Department of Energy's Idaho National Laboratory. (Read more about elevated cancer rates in the counties surrounding the Idaho National Laboratory in the Environmental Defense Institute June and July 2020 newsletters.)

Because state regulators were prone to lying about the radioactive and chemical releases from the Santa Susana site, the independent researchers collected and analyzed 360 samples of soil and ash. Much higher radioactivity than anticipated was found in 3 percent of the samples. And the radioactivity had spread miles beyond the Santa Susana site. ¹⁵

The poor oversight of the Santa Susana laboratory by the Atomic Energy Commission later to become the Department of Energy was coupled with nuclear contractors that sought to cover up accidents and mishaps and to minimize the reporting of contamination and radiological releases.

The "Sodium Reactor Experiment" (SRE) was a sodium-cooled nuclear reactor that operated from 1957 to 1954 and in 1959 had melted fuel with subsequent airborne releases. ¹⁶ Many incidents of radiological releases occurred at the SRE and other facilities which the radiation dose reconstruction by NIOSH had not addressed. ¹⁷

The Department of Energy had annual environmental reports for the Santa Susana site. In 1989, a U.S. Environmental Protection Agency official, Gregg Dempsey, identified concerns about the validity of some, if not all, of the environmental data for the Santa Susana site. ¹⁸ For example, soil samples were heated for 8 hours at 500 C, and the temperature is sufficient to volatilize most man-made radionuclides of concern, including the cesium-137 and strontium-90. Vegetation samples were rinsed and then heated, volatilizing the radionuclides of concern.

The radiation dose reconstruction by NIOSH had stated that tritium in water supply wells had never been detected above 1000 picocuries per liter (pCi/L). NIOSH concluded that workers could have consumed water with 30,000 pCi/L of tritium in the 1950s and 1960s. Yet, tritium,

¹⁵ Dr. Marco Kaltofen, Arnie Gundersen and Maggie Gundersen, *Journal of Environmental Radioactivity*, "Radioactive microparticles related to the Woolsey Fire in Simi Valley, CA," October 8, 2021. <u>https://doi.org/10.1016/j.jenvrad.2021.106755</u> or <u>https://www.sciencedirect.com/science/article/abs/pii/S0265931X21002277?dgcid=coauthor</u> (See <u>https://www.fairewinds.org/demystify/woolsey-fire-data for more information.</u>)

¹⁶ S. Cohen & Associates, Issues Matrix for the Santa Susana SEC Petition and NIOSH Evaluation Report, Working Draft, April 2009, Updated September 2014. (See sca-ssflsecim-r1.pdf at cdc.gov)

¹⁷ CORE Advocacy for Nuclear & Aerospace Workers, 2016 Site Description: Santa Susana Field Laboratory (SSFL) – Proposed Corrections to Technical Basis Documents 1 & 2 ORAUT-TKBS-0038-1/ORAUT-TKBS-0038-2, Presented to NIOSH/ABRWH at Idaho Falls, ID ABRWH Meeting, August 9, 2016.

¹⁸ S. Cohen & Associates, Issues Matrix for the Santa Susana SEC Petition and NIOSH Evaluation Report, Working Draft, April 2009, Updated September 2014. (See sca-ssflsecim-r1.pdf at cdc.gov), pages 15 and 16.

with a 12-year radioactive half-life was detected in groundwater in 2006, with a maximum of 117,000 pCi/L.¹⁹

The reactor accidents and other radiological releases contaminate the site, harm workers and harm people living off of the site by the spread of radiological contamination.

Worker's suffering cancer and other illnesses did not have a compensation program for decades and even then, compensation for former Energy employees may be denied. (There is no program for radiation workers at U.S. Nuclear Regulatory Commission licensed reactors, disposal facilities or fuel fabrication facilities.) At the Area IV of the Santa Susana Field Laboratory, the worker radiation protection and monitoring programs are now acknowledged to have been so bad that all workers who worked there between 1955 and 1988 are automatically eligible for illness compensation. ^{20 21} Department of Energy operations for nuclear reactor testing and nuclear support operations were conducted from 1955 to 1988. Since 1988, decommissioning of structures and the "characterization, treatment, packaging and temporary storage of radioactive and mixed waste" or so-called remediation have been ongoing. But it is claimed that radiation monitoring since 1988 has been adequate for radiation dose reconstruction and therefore no special exposure cohort for automatic approval is needed.

People in nearby communities have unreported, unmonitored exposures and have elevated rates of cancer. Yet there is no compensation or official recognition of these cancers being due to the radiological releases.

At the various contaminated Department of Energy laboratories, some meaningful investigations of radiological and chemical contamination may be conducted by the Environmental Protection Agency or others. However, this does not mean that an adequate cleanup will occur. The State agencies and EPA tend to work to save federal dollars and capitulate to accept very inadequate cleanup.

Fires occurring in radiologically contaminated areas lead to air monitoring blackouts as state and federal agencies tend to cover up the issue of radiological contamination in the air. The environmental monitoring typically conducted by state agencies is often a sham as these agencies work closely with the Department of Energy. The 2019 "Sheep Fire" at the Idaho National Laboratory burned 133 square miles which included soils that have had years of extensive

¹⁹ S. Cohen & Associates, Issues Matrix for the Santa Susana SEC Petition and NIOSH Evaluation Report, Working Draft, April 2009, Updated September 2014. (See sca-ssflsecim-r1.pdf at cdc.gov), pages 4 to 6.

²⁰ National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, Division of Compensation Analysis and Support, Area IV of the Santa Susana Field Laboratory SEC-00235, Presentation August 23-24, 2017 in Santa Fe, NM.

²¹ Energy Employee Illness Compensation Program, Federal Register, October 5, 2001, Department of Health and Human Services at <u>https://www.cdc.gov/niosh/pdfs/42cfr81.pdf</u>

radioactive fallout from the INL experiments, accidents and operations. Presentations of the "Sheep Fire" did not include radiological monitoring data.²²

EPA RadNet blackouts that have occurred in western states as radiation levels were increased by Navy and Department of Energy activities. ²³ Also, the explosion at the non-NRC-licensed radioactive waste dump at Grand View Idaho that had an explosion in 2018 was followed by three weeks of blackout of the nearby EPA RadNet radiological air monitoring data.

Department of Water Resources continues working on proposed rule changes for dams and mine tailings dams – to reduce regulations, not to improve safety

The previously scheduled July 28 meeting on rule making for mine tailings impoundment structures and the safety of dams has been postponed. ²⁴ The Idaho Department of Water Resources is preparing its next draft of proposed changes, and the next public meeting for addressing comments to that draft has not been scheduled.

The current regulations, "Safety of Dams Rules" (IDAPA 37.03.06) and "Mine Tailings Impoundment Structures Rules" (IDAPA 37.03.05), are being modified and combined into one single new rule chapter, "Safety of Dams and Mine Tailings Impoundment Structures Rules" (draft IDAPA 37.03.05).²⁵

There are about 390 state regulated dams in Idaho and only 18 are tailings dams, according to my search of the National Inventory of Dams database online. There are 96 high hazard dams, and 144 significant hazard dams (this includes tailings dams). The hazard classification of tailings dams ranges from high to significant to low hazard (see Figure 1).

Around the world, there have been 148 tailings dam failures since 1960. There have already three tailings dam failures in 2022 and four tailings dam failures in 2021. There were 40 tailings dam failures between 2011 and 2020, exceeding the number of failures in any decade since 1960.

²² See the February/March 2020 Environmental Defense Institute website newsletter article "DOE acknowledges that last year's fire at the INL increased radiological contamination levels around the globe, but won't provide specifics" at <u>http://www.environmental-defense-institute.org/publications/</u>

²³ See the February/March 2020 Environmental Defense Institute website newsletter article "EPA RadNet air monitoring blackouts are the way nuclear polluters do business" at <u>http://www.environmental-defense-institute.org/publications/</u>

²⁴ Idaho Department of Water Resources rulemaking information page for IDAPA 37.03.05 (Mine Tailings Impoundment Structures) and 37.03.06 (Safety of Dams) is at <u>https://idwr.idaho.gov/legal-actions/rules/idwrrulemaking-2022-2023/mine-tailings-impoundment-structures-safety-of-dams-rules/</u> and general web address <u>www.idwr.idaho.gov</u> (Accessed July 28, 2022, no new meeting date has been set yet.)

²⁵ The draft rule can be found at <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/rule-37-03-05/rule-37-03-05/rule-37-03-05/rule-37-03-05/rule-37-03-06-202205223-strawman-v1.0.pdf</u> (or <u>link</u>). The existing rules can be found at <u>https://adminrules.idaho.gov/rules/current/37/</u>

Source: Wise-Uranium, webpage: Chronology of major tailings dam failures, as of April 2022, beginning in 1960, at <u>https://www.wise-uranium.org/mdaf.html</u>

Despite the deteriorating dams and the high number of mine tailings dam failures worldwide, the Idaho Department of Water Resources has initiated its rule making because of the governor's Zero-Based Regulation initiative, to reduce regulations.²⁶

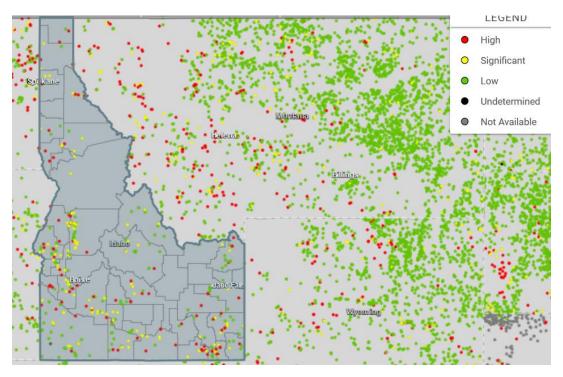


Figure 1. Map of high, significant and low hazard dams in Idaho. (Source: National Inventory of Dams, <u>https://nid.usace.army.mil</u>)

The IDWR calls tailings dams "Mine Tailings Impoundment Structures" (MTISs). Two very important design criteria for dams and MTISs are for water release capacity and seismic capacity. In my first set of comments to the IDWR, I addressed release capacity which is dependent upon estimated probable flooding inflows. Despite long known increasing risk of severe weather events due to climate change, the IDWR has proposed reducing the size of design probable flooding inflows to consider for selection of the design criteria for flooding inflows.

This is despite recent flooding in the neighboring state of Montana, which this June exceeded 1-in-500-year flood levels due to unexpected heavy snow followed by heavy rain this spring, despite a dry winter.

²⁶ Executive Department State of Idaho, Executive Order No. 2020-01 "Zero-Based Regulation," signed by Gov. Brad Little. To begin January 1, 2021 that state agencies are to remove regulatory burden. <u>https://gov.idaho.gov/wp-content/uploads/sites/74/2020/01/eo-2020-01.pdf</u>

By 2017 it had been recognized by professionals that climate change increases the risk of severe weather and flooding and the risk of failure of MTISs.²⁷

Upon further review of the IDWR's proposed changes in the first "strawman," I focused on the hazard classification of dams and MTISs and on the selection of the design earthquake for assessing the seismic adequacy of dam and MTISs structures to withstand earthquakes. But the comment period is not currently open and IDWR is not currently accepting comments as it prepares its next Strawman draft.

Regulations for dams and MTISs need to set appropriate minimum design standards. In the first proposed Strawman, the regulations allow waiving design requirements or allow unstated bottomless reductions in the minimum design requirements. This almost infinite flexibility can save mining companies money but it puts Idaho citizens and the environment at risk. Furthermore, it does not provide stakeholders with any reason to have confidence that IDWR will require and enforce reasonable minimum design standards.

In Idaho, large sums of money flow into political campaigns from the mining industry. In Idaho, lawmakers can influence agencies and can also remove any regulation, line-by-line, that a regulatory agency like the IDWR creates. Motives to "reduce regulation" are not necessarily in the best interest of Idaho and require scrutiny rather than unquestioned acceptance. One of the top three sectors contributing to the governor's recent campaign is the mining industry.

It needs to be understood that dams designed to hold water, *when properly designed and properly constructed* tend to be reliable structures. Not all dams in Idaho regulated by the IDWR necessarily meet these criteria. For example, the Mackay dam was not properly designed and construction quality was flawed. The spillway capacity for the Mackay dam was never adequate and despite the IDWR not wanting the Mackay dam capacity increased, legal action allowed its storage capacity to be increased. The Department of Energy continues to avoid addressing the new information pertaining to the Mackay dam's inadequate spillway capacity and the increased likelihood of flooding of nuclear facilities at the Idaho National Laboratory.

Mine Tailings Impoundment Structures (MTISs), often called "tailings dams" continue to have a performance record of failure that has a far higher failure likelihood than water dams. The continuing failures of MTISs in the last twenty years continues to be alarmingly high and often with catastrophic consequences for the environment. And this is true of developed countries with supposedly stringent regulatory oversight, like Canada. Sudden catastrophic failure of tailings dams release toxic metals and materials into the environment in very large amounts.²⁸

²⁷ Roche, C. Thygesen, K., Baker, E. (Eds.) *Mine Tailings Storage: Safety Is No Accident*. A UNEP Rapid Response Assessment. United Nations Environmental Programme and GRID-Arendall, Nairobi and Arendal, <u>www.grida.no</u>. 2017. ISBN: 978-82-7701-170-7

²⁸ Roche, C. Thygesen, K., Baker, E. (Eds.) *Mine Tailings Storage: Safety Is No Accident*. A UNEP Rapid Response Assessment. United Nations Environmental Programme and GRID-Arendall, Nairobi and Arendal, <u>www.grida.no</u>. 2017. ISBN: 978-82-7701-170-7

As other states like Alaska were reviewing their regulations for dams and MTIS back in 2017, ²⁹ it seems that the IDWR is still lagging behind in ensuring adequate regulations. IDWR has emphasized that this rulemaking is about "zero-based regulations" and the overriding goal of reducing regulations. At the rulemaking meetings, ensuring stringent design criteria has not been mentioned nor has the IDWR's reductions in design criteria in the proposed draft Strawman been described or discussed in this rulemaking effort.

The IDWR has reduced the standards for new dams and tailings dams below that of existing structures. Usually, new structures have more stringent requirements, not less.

The IDWR has also given the Director the ability to waive seismic design requirements, at whim without connection to hazard category criteria. The proposed rules are supposed to be a guideline and the proposed changes fail to establish minimum standards, even for high hazard and significant hazard dams and tailings dams.

The IDWR has also inexplicably removed reduced safety requirements for significant hazard dams and structures, which is odd given that its high hazard and significant hazard consequences are very high and are nearly indistinguishable.

My additional set of comments on the first strawman cannot be submitted to the IDWR because per their request, the comment period is currently closed until they finish their second Strawman draft. See my first comment submittal and the not-submitted additional comments on the Environmental Defense Institute home page.

Articles by Tami Thatcher for August 2022.

²⁹ Charles F. Cobb, PE, Alaska Business Monthly, "Update on Mne Tailings Dam Regulation in Alaska and North America," January 2017. <u>www.akbizmag.com</u>