FLORIDA HOUSE OF REPRESENTATIVES
BILL ANALYSIS

This bill analysis was prepared by nonpartisan committee staff and does not constitute an official statement of legislative intent.

BILL #: CS/HB 585	**COMPANION BILL:** SB 832 (Burgess)
TITLE: Former Phosphate Mining Lands	**LINKED BILLS:** None
SPONSOR(S): Albert	**RELATED BILLS:** None

Committee References

Natural Resources & Disasters 16 Y, 2 N, As CS ➤ Civil Justice & Claims ➤ State Affairs

SUMMARY

Effect of the Bill:

For lawsuits related to environmental pollution that are brought under the Water Quality Assurance Act, which imposes strict liability on a person or entity that is responsible for the pollution, the bill establishes a defense from strict liability if the lawsuit is related to pollution caused by a former phosphate mine and certain requirements are met. This strict liability defense applies to lawsuits brought by the Department of Environmental Protection as well as lawsuits brought by any other person. In order for a defendant to be exempt from strict liability under the defense created by the bill, the defendant must prove:

- The condition giving rise to the lawsuit is a natural geology substance of a former phosphate mine;
- A notice that identifies the property as a former phosphate mine has been recorded with the county where the property is located; and
- The Department of Health (DOH) has conducted a gamma radiation survey of the land parcel where the former phosphate mine is located.

For any lawsuit based on strict liability, negligence, or similar conduct related to an alleged discharge of hazardous substances or condition of pollution related to phosphate mining, the bill requires the plaintiff to include with the complaint a radiation survey that meets certain requirements.

Fiscal or Economic Impact:

The bill may have an indeterminate negative fiscal impact on DOH associated with conducting radiation surveys as required by the bill. The bill may also have an indeterminate fiscal impact on the private sector.

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ANALYSIS

EFFECT OF THE BILL:

The bill provides a legislative finding that phosphate mining is an essential agricultural activity that is necessary for the food security of the nation and the state and that former mined lands are a valuable resource. The bill specifies that the highest and best use of formerly mined lands is in the state's interest. (Section 2)

The bill defines "former phosphate mine" to mean an area of land upon which phosphate mining has been conducted and which may have been subject to a radiation survey and state reclamation requirements, but does not include a phosphogypsum stack. (Section 2)

For lawsuits related to environmental pollution that are brought under the Water Quality Assurance Act (WQAA), which imposes strict liability on a person or entity that is responsible for the pollution, the bill establishes a defense from strict liability if the lawsuit is related to pollution caused by a former phosphate mine and certain requirements are met. This strict liability defense applies to lawsuits brought by the Department of Environmental Protection (DEP) as well as lawsuits brought by any other person. Therefore, if the requirements for the strict liability defense are met, DEP or the person bringing the action must prove that the party alleged to be responsible for the pollution engaged in negligence. (Section 1)

In order for a defendant to be exempt from strict liability under the defense created by the bill, the defendant must prove:

- The condition giving rise to the lawsuit is a natural geology substance of a former phosphate mine;
- A notice that identifies the property as a former phosphate mine has been recorded with the county where the property is located; and
- The Department of Health (DOH) has conducted a gamma radiation survey of the land parcel where the former phosphate mine is located. (Section 1)

To meet the notice requirement, the bill authorizes a landowner to record a notice in the official county records that identifies the landowner's property as a former phosphate mine. The bill requires recorded notices to be in substantially the following form:

NOTICE

This property is a former phosphate mine as defined in s. 378.213(3), Florida Statutes.

The bill specifies that such recording serves as notice that the land is a former phosphate mine. (Section 2)

To meet the gamma radiation survey requirement, the bill also establishes a process whereby a landowner can request that DOH conduct such survey on a former phosphate land parcel. Upon such request, DOH must conduct the survey within 120 days to determine the radioactivity levels. The survey must document gamma radiation exposure measurements and the locations of the measurements. The bill requires such gamma radiation measurements to be taken at the density of one per site or one per acre of land, whichever is greater. (Section 3)

The bill requires DOH to provide a copy of the preliminary survey results to the landowner within 30 days after completion of the survey. Within 60 days after receipt of the survey, the landowner may request an additional survey based upon a reasonable belief that the survey was flawed or not representative of conditions on the site. The bill requires DOH to conduct one additional survey within 90 days after receipt of the request. The additional survey must meet the requirements described above and is deemed final within 90 days after completion. (Section 3)

For any lawsuit based on strict liability, negligence, or similar conduct related to an alleged discharge of hazardous substances or condition of pollution related to phosphate mining, the bill requires the plaintiff to include with the complaint a radiation survey that meets certain requirements. The bill specifies that the lawsuits subject to this requirement include those that relate to the presence of mining overburden, solid waste from the extraction, or beneficiation of phosphate rock from a phosphate mine as well as any other similar claim related to the mining of phosphatic rock or reclamation of a mined area. (Section 4)

The bill requires such surveys to be prepared by a person certified as either a health physicist by the American Board of Health Physics or as a radiation protection technologist by the National Registry of Radiation Protection Technologists. The survey must be representative and document the measured gamma radiation on the property, including background values determined in accordance with the Environmental Protection Agency's Multi-agency Radiation Survey and Site Investigation Manual;[1] the locations of the measurements; the testing equipment; testing methodology used, including the equipment calibration date and protocol; and the name of the person performing the survey and describe the person's relevant training, education, and experience. The survey must be verified under penalty of perjury. (Section 4)

The effective date of the bill is July 1, 2025. (Section 5)

[1] The Multi-Agency Radiation Survey and Site Investigation Manual is a manual created with input from multiple federal agencies that provides information on planning, conducting, evaluating, and documenting building surface and surface soil final status radiological surveys for demonstrating compliance with dose or risk-based regulations or standards. Environmental Protection Agency (EPA), *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, https://www.epa.gov/sites/default/files/2017-09/documents/marssim_manual_rev1.pdf (last visited Feb. 25, 2025).

FISCAL OR ECONOMIC IMPACT:

STATE GOVERNMENT:

The bill may have an indeterminate negative fiscal impact on DOH associated with conducting radiation surveys as required by the bill.

PRIVATE SECTOR:

The bill may have an indeterminate positive fiscal impact on landowners of former phosphate mines who may have a defense to strict liability lawsuits under the WQAA. The bill may have an indeterminate negative fiscal impact on plaintiffs associated with hiring a health physicist or radiation protection technologist.

RELEVANT INFORMATION

SUBJECT OVERVIEW:

Phosphate Mining

Phosphate rock contains the mineral phosphorus, an ingredient used in some fertilizers to help plants grow strong roots.[2] Phosphate rock contains small amounts of naturally-occurring radioactive[3] elements, known as radionuclides, such as uranium and radium.[4] The natural breakdown of uranium and radium results in radon, a radioactive gas that can move through the ground to accumulate in buildings over time.[5]

Prior to mining for phosphate, certain permits must be obtained, and the land must be surveyed and cleared to prepare the site for mining.[6] The phosphate is mined by digging up the top 15 to 30 feet of earth to dig out the phosphate rock.[7] The phosphate rock is dug out with clay and sand that is then dumped into a pit to create a slurry that is then sent to a beneficiation plant where the phosphate is separated from the sand and clay.[8] When processing phosphate rock to make fertilizer, the phosphorous is removed by dissolving the rock in an acidic solution.[9] The solid waste that is left behind is called phosphogypsum.[10]

Phosphogypsum stacks are any defined geographic area associated with a phosphoric acid production facility at which phosphogypsum is disposed of or stored, other than within a fully enclosed building, container, or tank.[11] To limit the public's exposure to radon, which is created as a result of radium decay of phosphogypsum, the phosphogypsum stacks are located on private property, away from the public.[12] DEP regulates phosphogypsum

[2] EPA, *Radioactive Material from Fertilizer Production*, https://www.epa.gov/radtown/radioactive-material-fertilizer-production (last visited Feb. 20, 2025).
[3] These elements emit radiation at a specific rate that is measured in terms of a half-life. A half-life is the time required for half of the radioactive atoms present to decay. This process can take seconds or millions of years, depending on the radionuclide. EPA, *Radionuclides*, https://www.epa.gov/radiation/radionuclides (last visited Feb. 21, 2025).
[4] EPA, *Radioactive Material from Fertilizer Production*, https://www.epa.gov/radtown/radioactive-material-fertilizer-production (last visited Feb. 21, 2025).
[5] EPA, *Radionuclide Basics: Radon*, https://www.epa.gov/radiation/radionuclide-basics-radon (last visited Feb. 21, 2025).
[6] Department of Environmental Protection (DEP), *Phosphate*, https://floridadep.gov/water/mining-mitigation/content/phosphate (last visited Feb. 21, 2025).
[7] *Id.*
[8] *Id.*
[9] EPA, *Radioactive Material from Fertilizer Production*, https://www.epa.gov/radtown/radioactive-material-fertilizer-production (last visited Feb. 21, 2025).
[10] EPA, *Phosphogypsum*, https://www.epa.gov/radiation/phosphogypsum (last visited Feb. 21, 2025).
[11] Section 403.4154(d), F.S.
[12] *Id.*; EPA, *Radioactive Material from Fertilizer Production*, https://www.epa.gov/radtown/radioactive-material-fertilizer-production (last visited Feb. 21, 2025).

stacks and phosphogypsum stack systems[13] to ensure they are maintained to meet safety standards to prevent any harmful spills or discharges to surface or ground waters.[14]

Phosphate Mines in Florida

Phosphate mining is the fifth largest mining industry in the United States (U.S.) in terms of the amount of material mined.[15] Florida is the largest known U.S. source of phosphates, accounting for more than 60 percent of U.S. production.[16] Within Florida, phosphate mining primarily occurs in an area known as Bone Valley. This area is approximately 1.3 million acres that span Hardee, Hillsborough, Manatee, and Polk counties.[17]

There are 28 phosphate mines in Florida, of which 11 mines are currently active and 10 mines are 100 percent reclaimed and released from reclamation obligations.[18] The remaining mines are either not started or are shut down. Phosphate mines typically range in size from approximately 5,000 to 100,000 acres.[19] Approximately 25 to 30 percent of these lands are wetlands or other surface waters.[20]

Reclamation

The Legislature has found that mining phosphate serves as an important economic interest for the state, but recognizes that it is a temporary land use.[21] As such, all lands mined after July 1, 1975, are required to be reclaimed once mining is completed at a site.[22] DEP is responsible for creating and enforcing rules regarding phosphate mining, including phosphate mine reclamation.[23]

The process of reclamation begins with an applicant submitting a conceptual plan[24] application for reclamation at least six months prior to beginning site preparation[25] or mining operations,[26] whichever occurs first.[27] To be approved, a conceptual plan has to meet certain safety, water quality, flooding and draining, and waste disposal criteria.[28] Reclamation and restoration of mining lands must be completed within two years of the actual completion of mining operations.[29] Each year on March 1, after the approval of a conceptual reclamation plan, each operator is required to submit an annual mining and reclamation report describing the mining and reclamation activities for the previous calendar year and the proposed mining and reclamation for the current year.[30]

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[13] "Phosphogypsum stack system" means the phosphogypsum stack, pile, or landfill, together with all pumps, piping, ditches, drainage conveyances, water-control structures, collection pools, cooling ponds, surge ponds, and any other collection or conveyance system associated with the transport of phosphogypsum from the plant to the phosphogypsum stack, its management at the stack, and the process-wastewater return to the phosphoric acid production or other process. This does not include conveyances within the confines of the fertilizer production plant. Section 403.4154(e), F.S.

[14] Section 403.4155(1), F.S.

[15] EPA, *Radioactive Material from Fertilizer Production*, https://www.epa.gov/radtown/radioactive-material-fertilizer-production (last visited Feb. 21, 2025).

[16] United States Geological Survey, *LCMAP Assessment: Phosphate Mining in Florida*, https://geonarrative.usgs.gov/lcmap-assessment-phosphate-mining-florida/ (last visited Feb. 21, 2025).

[17] DEP, *Phosphate*, https://floridadep.gov/water/mining-mitigation/content/phosphate (last visited Feb. 21, 2025).

[18] *Id*.

[19] *Id*.

[20] *Id*.

[21] Section 403.4154(2), F.S.; Section 378.202(1), F.S.

[22] Section 378.204, F.S. These lands are referred to as mandatory land, whereas lands mined prior to July 1, 1975, were exempt from reclaim regulations and are called nonmandatory land.

[23] Section 378.205(2), F.S.

[24] "Conceptual plan" means a graphic and written description of general activities to be undertaken across the whole mine to comply with the reclamation standards. Rule 62C-16.0021(5), F.A.C.

[25] "Site preparation" means those physical activities involving clearing or modification of the land surface conducted before initiating mining or mining operations, excluding prospecting, or agricultural practices or agricultural activities that are not initiated to directly serve future mining operations. Rule 62C-16.0021(20), F.A.C.

[26] "Mining operation" means those physical activities other than prospecting and site preparation which are necessary for extraction, waste disposal, storage, or dam maintenance prior to abandonment. Rule 62C-16.0021(10), F.A.C.

[27] Rule 62C-16.0032, F.A.C.

[28] Rule 62C-16.0051, F.A.C.

[29] Section 378.209(1), F.S.; Rule 62C-16.0051(12)(b)4., F.A.C.

[30] Rule 62C-16.0091(1), F.A.C.

During the process of reclamation, credentialed representatives of DEP are authorized to enter lands for the purpose of inspecting to ensure compliance with reclamation regulations.[31] Once an operator of a phosphate mine has completed its reclamation and restoration requirements within a reclamation parcel, it may request a release of the reclamation parcel through writing.[32] Within 90 days of receiving a written request for release, DEP will do a final inspection of the land. If DEP does not find that all the reclamation and restoration requirements have been met, it will notify the operator of the deficiencies that must be corrected.[33] When DEP approves of the reclamation and restoration of a parcel, an operator is released from their reclamation and tax obligations for the phosphate mining parcels.[34]

Radiation Surveys

Radon that naturally occurs in soil is generally not a health concern, however, exposure to radon at higher levels and over prolonged periods of time can cause a serious hazard to human health by increasing the risk of developing lung cancer.[35] DOH takes samples from the soil, air, and water from phosphate mining parcels before mining begins and after reclamation has been completed to monitor the radioactivity of phosphate mining sites.[36] These samples include gamma radiation exposure measurements, soil radon emanation determinations, soil radium determinations, air monitoring, and surface and ground water monitoring of areas that are potentially impacted by mining activities.[37] DOH requires a mining company to pay fees for such monitoring.[38]

Radiation Measurement Specialists

DOH requires any person who tests or mitigates the presence of radon for a fee to be certified by DOH.[39] Additionally, the American Board of Health Physics and the National Registry of Radiation Protection Technologists have certification programs for specialists engaging in radiation measurements.

A health physicist who is certified by the American Board of Health Physics must do the following to become certified:

- Obtain a bachelor's or graduate degree from an accredited college or university in physical science, engineering, or biological science;
- Complete at least six years of responsible professional experience in health physics, with three years of that being applied health physics. A degree may be substituted for two years of experience;
- Submit a list of professional references;
- Submit a written report demonstrating that the candidate has produced professional level work in health physics; and
- Pass a two-part exam.[40]

A radiation protection technologist who is certified by the National Registry of Radiation Protection Technologists must do the following to become certified:

- Have a high school diploma or equivalent;
- Be at least 21 years old at the time of applying;
- Submit evidence of operational abilities as a Radiation Protection Technologist, showing at least five years of experience. Experience can be substituted for training or formal education; and
- Pass an examination.[41]

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[31] Rule 62C-16.0067(1), F.A.C.
[32] Rule 62C-16.0068(1), F.A.C.
[33] Rule 62C-16.0068(3), F.A.C.
[34] Rule 62C-16.0068(3)(b), F.A.C.
[35] EPA, *Phosphogypsum*, https://www.epa.gov/radiation/phosphogypsum (last visited Feb. 24, 2025).
[36] DOH, *Environmental Radiation Programs*, https://www.floridahealth.gov/environmental-health/radiation-control/envrad/index.html (last visited Feb. 24, 2025). Rule 64E-5.1002, F.A.C.
[37] Rule 64E-5.1002, F.A.C.
[38] Rule 64E-5.1003, F.A.C.; Gamma radiation exposure measurements are made at the rate of one per acre.
[39] Rule 64E-5.1203(2), F.A.C.
[40] American Board of Health Physics, *Prospectus for the American Board of Health Physics*, https://www.aahp-abhp.org/wp-content/uploads/2024/10/Prospectus-for-the-ABHP-June-2024.pdf (last visited Feb. 24, 2025).
[41] National Registry of Radiation Protection Technologists, *Examination Requirements, Fees and Schedules*, https://www.nrrpt.org/index.cfm/m/7/ (last visited Feb. 24, 2025).

Legal Liability Standards

Strict Liability

Strict liability is a legal concept in civil and criminal actions that holds a defendant liable for committing an action, regardless of their intent or mental state.[42] The plaintiff in a civil action where strict liability applies does not have to prove the defendant was negligent in order to prevail in the action.

Negligence

Tortious conduct, or torts, are typically divided into two categories: intentional torts or unintentional acts known as negligence. Negligence is the failure to behave with the level of care that a reasonable person would have exercised under the same circumstances.[43] To prevail in a negligence lawsuit, the party seeking the remedy must prove four elements: a legal duty was owed by the defendant to the plaintiff, the defendant breached that duty, the plaintiff's injury was caused by the defendant's breach, and damages resulted from that injury.[44]

Water Quality Assurance Act

In 1983, the Legislature passed the WQAA[45] to address pollution in surface and ground waters across the state.[46] To ensure the preservation of the state's water resources, the WQAA prohibits discharges or pollutants or hazardous substances into or upon the surface or ground waters of the state.[47] DEP is the agency authorized to establish and enforce programs to rehabilitate any polluted waters or lands.[48] As part of its authority, DEP may sue any person[49] to enforce the liabilities imposed by the WQAA.[50]

Additionally, the WQAA creates a private cause of action for all damages resulting from a discharge[51] or other condition of pollution covered under the WQAA if the discharge was not specifically authorized by ch. 403, F.S.[52] The WQAA defines pollution as the presence on the land or in the waters of the state of pollutants in quantities that are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property or which may unreasonably interfere with the enjoyment of life or property, including outdoor recreation.[53]

The WQAA imposes strict liability on a polluter, meaning it is only necessary to show the prohibited discharge or other pollutive condition occurred, and it is not necessary to prove the polluter acted negligently.[54] The WQAA expressly imposes strict liability on an owner or operator of a facility or any person who caused a discharge or other polluting condition at a facility.[55]

Because the WQAA imposes a strict liability standard, if a defendant is sued under the WQAA, the only defense a defendant may plead and prove to avoid liability is that the occurrence was solely the result of any of the following conditions or a combination of conditions:

- An act of war;

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[42] Cornell Law School, *Strict Liability*, https://www.law.cornell.edu/wex/strict_liability (last visited Feb. 25, 2025).
[43] Cornell Law School, *Negligence*, https://www.law.cornell.edu/wex/negligence (last visited Feb. 27, 2025).
[44] *Barnett v. Dept. of Fin. Serv.*, 303 So. 3d 508 (Fla. 2020).
[45] Sections 376.30-376.317, F.S.
[46] Section 376.30, F.S.; University of Florida Institute for Food and Agricultural Sciences, *Water Quality Assurance Act*, https://www.piecenter.com/pep/wp-content/uploads/PEP_WQAA_Final.pdf (last visited Feb. 27, 2025).
[47] Section 376.302(1), F.S.
[48] Section 376.30(3), F.S.
[49] "Person" means any individual, partner, joint venture, or corporation; any group of the foregoing, organized or united for a business purpose; or any governmental entity.
[50] Section 376.303(j), F.S.
[51] "Discharge" means any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, releasing, or dumping of any pollutant or hazardous substance which occurs and which affects lands and the surface and ground waters of the state not regulated by the WQAA. Section 376.301(13), F.S.
[52] Section 376.313(3), F.S.; Chapter 403, F.S., relates to environmental control, including pollution control, environmental regulation, and water supply and water treatment plants.
[53] Section 376.301(37), F.S.
[54] Section 376.308(1), F.S.
[55] Section 376.308(1)(a), F.S.

- An act of government;[56]
- An act of God;[57] or
- An act or omission of a third party under certain conditions.[58]

Liability under the WQAA is joint and several.[59] However, if more than one discharge has occurred and the damage is divisible and can be attributed to a particular defendant or defendants, each defendant is liable only for the costs associated with his or her damages.[60]

RECENT LEGISLATION:

YEAR	BILL #	HOUSE SPONSOR(S)	SENATE SPONSOR	OTHER INFORMATION
2024	CS/CS/HB 789	Overdorf	Burgess	The bill died on the Second Reading Calendar.

BILL HISTORY

COMMITTEE REFERENCE	ACTION	DATE	STAFF DIRECTOR/ POLICY CHIEF	ANALYSIS PREPARED BY
Natural Resources & Disasters Subcommittee	16 Y, 2 N, As CS	3/4/2025	Moore	Gawin
THE CHANGES ADOPTED BY THE COMMITTEE:	• Defined "former phosphate mine." • Established form language for notices recorded with a county identifying land as a former phosphate mine.			
Civil Justice & Claims Subcommittee				
State Affairs Committee				

THIS BILL ANALYSIS HAS BEEN UPDATED TO INCORPORATE ALL OF THE CHANGES DESCRIBED ABOVE.

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[56] Section 376.308(2)(b), F.S. This includes state, federal, or local acts of government, unless the person claiming the defense is a governmental body, in which case the defense is available only by acts of other governmental bodies.
[57] Section 376.308(2)(c), F.S.; This includes only unforeseeable acts exclusively occasioned by the violence of nature without the interference of any human agency.
[58] Section 376.308(2), F.S.; Defenses exist for an owner of a petroleum storage facility or a drycleaning or wholesale supply facility where certain circumstances apply.
[59] Section 376.313(4), F.S.; Joint and several liability refers to instances where there are multiple parties who are liable for an injury, and each party responsible for the injury may be liable to the extent they caused the injury. Cornell Law School, *Joint and Several Liability*, https://www.law.cornell.edu/wex/strict_liability (last visited Feb. 27, 2025).
[60] *Id*.