The Florida Senate
Local Funding Initiative Request
Fiscal Year 2021-2022

LFIR # 1716

1. Project Title University of Florida PFAS Contaminated Material Treatment Pilot

2. Senate Sponsor Ben Albritton

3. Date of Request 02/18/2021

4. Project/Program Description

PFAS, a large group of chemicals used in a wide variety industrial applications, have recently been identified as a major human health threat. Over 100 PFAS contaminated sites have been identified so far in Florida and many contaminated sites such as firefighting training sites, military installations and dry-cleaners are expected to require soil and water remediation. This creates an immediate need for safe and effective treatment processes. Traditional contaminated soils treatment process are not effective for treating PFAS contaminated materials, but preliminary research indicates that high-temperature thermal treatment may be more effective; more research is urgently needed. The requested appropriation will fund research on thermal treatment of PFAS contaminated soil geared towards creating a usable agricultural product. A competitive bidding process will allocate some of the funding towards retrofits to a traditional soil treatment plant that will be used for pilot scale research.

5. State Agency to receive requested funds Department of Environmental Protection

State Agency contacted? Yes

6. Amount of the Nonrecurring Request for Fiscal Year 2021-2022

Type of Funding	Amount
Operations	2,490,473
Fixed Capital Outlay	0
Total State Funds Requested	**2,490,473**

7. Total Project Cost for Fiscal Year 2021-2022 (including matching funds available for this project)

Type of Funding	Amount	Percentage
Total State Funds Requested (from question #6)	2,490,473	100%
Matching Funds		
Federal	0	0%
State (excluding the amount of this request)	0	0%
Local	0	0%
Other	0	0%
Total Project Costs for Fiscal Year 2021-2022	**2,490,473**	**100%**

8. Has this project previously received state funding? No

Fiscal Year (yyyy-yy)	Amount		Specific Appropriation #	Vetoed
	Recurring	Nonrecurring		

9. Is future funding likely to be requested? No

a. If yes, indicate nonrecurring amount per year.

b. Describe the source of funding that can be used in lieu of state funding.

10. Has the entity requesting this project received any federal assistance related to the COVID-19 pandemic?

No

If yes, indicate the amount of funds received and what the funds were used for.

11. Details on how the requested state funds will be expended

Spending Category	Description	Amount
Administrative Costs:		
Executive Director/Project Head Salary and Benefits		0
Other Salary and Benefits		0
Expense/Equipment/Travel/Supplies/ Other		0
Consultants/Contracted Services/Study	University of Florida Administrative Overhead for 3-year project duration	96,680
Operational Costs: Other		
Salary and Benefits	Principal investigator, research engineers/scientists and graduate research assistants (University of Florida Faculty) for 3-year project duration	528,593
Expense/Equipment/Travel/Supplies/ Other	Laboratory-scale equipment for thermal treatment evaluation, laboratory consumables, analytical instrumentation operating expenses, tuition waivers for graduate students for 3-year project duration	815,200
Consultants/Contracted Services/Study	Contract services for re-configuration and start-up of high-temperature PFAS treatment process (vendor to be selected through competitive request for proposals)	1,050,000
Fixed Capital Construction/Major Renovation:		
Construction/Renovation/Land/ Planning Engineering		0
Total State Funds Requested (must equal total from question #6)		**2,490,473**

12. Program Performance

a. What specific purpose or goal will be achieved by the funds requested?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals historically used in firefighting foams and the manufacture of many common products, and have recently been identified as a major human health threat. The goal of this project is to protect human health and the environment (surface water, groundwater and soil) in Florida by gaining an enhanced scientific understanding of this issue and identifying a reliable, safe and cost-effective process for treatment of materials that are generated from the cleanup of Florida's PFAS-contaminated sites. An additional goal of this project is to create a usable agricultural product from previously contaminated soils.

b. What activities and services will be provided to meet the intended purpose of these funds?

Research will be performed by the FDEP and University of Florida, plant modifications will be performed by local contractors, and operation of the experimental thermal treatment facility by an entity to be determined through competitive request for proposals.

c. What direct services will be provided to citizens by the appropriation project?

Facilitate the cost-effective remediation of PFAS contaminated sites located throughout Florida to protect human health and Florida's soil, surface water and groundwater resources.

d. Who is the target population served by this project? How many individuals are expected to be served?

All of the citizens, businesses and institutions of Florida. These substances are prevalent in Florida (estimated to be in the blood of 98% of the human population) and are persistent in the environment. Over 100 PFAS contaminated sites identified in Florida, so far.

e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

Identification of a reliable, safe and cost-effective treatment process for treatment of expected volumes of PFAS-contaminated materials generated in Florida remediation projects with the additional benefit of creating a treatment byproduct that would benefit Florida agriculture. The USEPA has recently established health-based drinking water thresholds for PFAS and the FDEP is in the process of formulating standards for Florida.
Project outcomes (expected treatment levels) will be based on these thresholds and additional thresholds established by the University of Florida and other researchers in the US.

f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for the contract?

The researchers and contractors performing this work will be expected to meet project deliverable deadlines and their work product must meet the standard-of-care for work of this nature.
Penalties for not achieving these performance measures may include financial penalties, cancellation of contracts, and a ban from future work with the State of Florida. No penalties are expected if the research indicates high-temperature thermal treatment is not feasible at a large scale.
Although preliminary research indicates high-temperature thermal treatment may be effective in treating PFAS-contaminated materials, this work is experimental and there is no guarantee that this process will work at a large scale. The purpose of this project is to verify that large-scale treatment is feasible.

13. The owners of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owners of the facility and the entity.

Fixed capital outlay funds will be awarded by the FDEP to a contaminated soil treatment contractor that will be selected by competitive request for proposal.

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14. Requestor Contact Information

a. First Name Timothy **Last Name** Townsend

b. Organization University of Florida

c. E-mail Address ttown@ufl.edu

d. Phone Number (352)494-8605 **Ext.**

15. Recipient Contact Information

a. Organization University of Florida

b. Municipality and County Alachua

c. Organization Type

☐For Profit Entity

☐Non Profit 501(c)(3)

☐Non Profit 501(c)(4)

☐Local Entity

☑University or College

☐Other (please specify)

d. First Name Timothy **Last Name** Townsend

e. E-mail Address ttown@ufl.edu

f. Phone Number (352)494-8605

16. Lobbyist Contact Information

a. Name None

b. Firm Name None

c. E-mail Address

d. Phone Number