

LFIR # 2390

- 1. Project Title PFAS Contaminated Material Treatment Pilot
- 2. Senate Sponsor Ben Albritton
- 3. **Date of Request** 01/21/2020

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 • No

6. Amount of the Nonrecurring Request for Fiscal Year 2020-2021

Type of Funding	Amount	
Operations	2,490,473	
Fixed Capital Outlay	000	
Total State Funds Requested	2,490,473	

7. Total Project Cost for Fiscal Year 2020-2021 (including matching funds available for this project)

Type of Funding	Amount	Percentage	
Total State Funds Requested (from question #6)	2490473	100.0 %	
Matching Funds			
Federal	00	0 %	
State (excluding the amount of this request)	00	0 %	
Local	00	0 %	
Other	00	0 %	
Total Project Costs for Fiscal Year 2020-2021	2,490,473	100 %	

8. Has this project previously received state funding? O Yes • No

If yes, provide the most recent instance:

Fiscal Year	Amount		Specific	
(уууу-уу)	Recurring	Nonrecurring	Appropriation #	Vetoed

9. Is future-year funding likely to be requested? O Yes • No

If yes, indicate nonrecurring amount per year.



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

Spending Category	Description	Amount
Administrative Costs:		
Executive Director/Project		
Head Salary and Benefits		
Other Salary and Benefits		
Expense/Equipment/ Travel/Supplies/Other		
Consultants/Contracted	University of Florida Administrative Overhead for 3-year project duration	96,680
Services/Study		90,000
Operational Costs: Oth	ner	
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		
Fixed Capital Construc	tion/Major Renovation:	
Construction/Renovation/	Contract services for re-configuration and start-up of high-temperature PFAS treatment process (vendor	4.050.000
Land/Planning Engineering	to be selected through competitive request for proposals)	1,050,000
5 5		
Total State Funds Re	equested (must equal total from question #6)	2 400 472
		2,490,473



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11. 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 in 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.



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12. 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.

13. 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.	
14.	Re	cipient Contact	Information		
	a.	Organization	University of Florida		
	b.	Municipality and	County Statewide		
	C.	Organization Typ	De		
		O For-profit E	ntity		
		O Non-Profit 8	501(c) (3)		
		O Non-Profit 5	501(c) (4)		
		 Local Entity 	,		
		 University c 	or College		
		Other (plea	se specify)		
	d.	First Name	Timothy	Last Name	Townsend
	e.	E-mail Address _t	town@ufl.edu		
	f.	Phone Number	(352)4948650		
15.	Lo	obbyist Contact I	nformation		
	a.	Name	None		
	b.	Firm Name	None		
	C.	E-mail Address			
	d.	Phone Number		Ext.	