



# PFAS

poly- and perfluoroalkyl substances



# Full Service Organics Management

- Over **15 years** of experience in this industry
- Started out at a large corporate company and worked there for 10 years
- Decided to take a leap of faith and start my own company: **FSO Management**
  - We have been successful serving different municipalities throughout Wisconsin, Upper Michigan, Minnesota, and Illinois for over 5 years
  - My company consists of myself and 5 employees that travel with the company and 2 others that keep the company running near our home base.
  - We clean digesters, water basins, holding tanks, lagoons in both industrial and commercial environments.
  - With experience and expertise in cleaning and land application services for an all-in-one sludge removal, from clean outs to transport and recycling, we can provide the highest standards of safety, compliance, and communication.



**Rich Ellman**

President

Full Service Organics Management LLC.

Liquid material goes from holding tank, to mix tank, then a mobile belt press which made 18-22% cake solids, finally to roll off boxes.



- From roll off boxes it was loaded up on flat bed trailer
- 9 loads/day roughly were hauled to south Chicago
- Loaded onto a train
- Hauled to Oregon to a closed loop landfill

Loading boxes onto a flatbed



Loading onto train in Chicago and hauled to OR



➤ For the cake with this amount of PFAS in it, we only had a few options for the disposal after checking with every local landfill or other municipalities.

❖ There were a few options across North America - one being in Canada

#### Clean Harbors

Lambton (Sarnia) Landfill Facility  
4090 Telfer Road, Rural Route #1  
Corunna ON N0N 1G0  
Canada  
Phone: (519) 864-1021

Waste Management  
Chemical Waste Management, Inc.  
Arlington Facility  
17629 Cedar Springs Lane  
Arlington, OR 97812  
Phone: (800) 963-4776  
Waste Management has an  
intermodal rail facility in Chicago  
Rail transport to the Oregon facility  
would be by Waste Mgmt.  
Use of 20-yd roll-off containers

Clean Harbors El Dorado, LLC  
El Dorado, Arkansas Incineration Facility  
309 American Circle  
El Dorado, AR 71730  
Phone: (870) 863-7173

# The Filtrate Process

From belt press to weir tank (to catch any bigger amounts of solids)



From weir to sand filter



Then to bag filter,



Finally, to carbon filter





- Sand filters for filtrate
  - Pictured is a two pod sand filter but would recommend a 3 pod sand filter going forward



Bag  
filters  
for  
filtrate



Carbon filters  
for filtrate



The holding tank was pumped to the bottom, washed with a fire hose and a squeegee broom was used until there were absolutely no solids left in the holding tank.



# Full Service Organics Management



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