



Crystal Environmental



5th Annual Waste Treatment
Symposium
Washington, PA

Dewatering Container Filters



*Wednesday
September 15, 2010*





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Therese Wheaton



*Wednesday
September 15, 2010*





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DEWATERING CONTAINER FILTERS ADVANTAGES:

- Economic Entry Point
- Unlocks the Opportunity
- Minimizes Initial Capital
- Affordable for 1-2 Truck Operation
- Can be sized to 5-10 Truck Operation



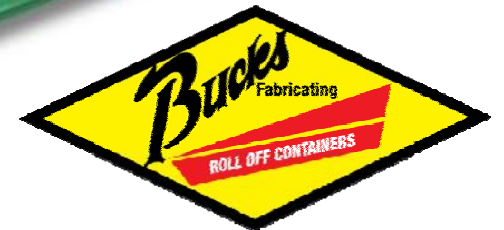


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DEWATERING CONTAINER FILTERS

ADVANTAGES:

- Portable Separation





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DEWATERING CONTAINER FILTERS: ADVANTAGES:

- Simple to Learn
- Simple to Operate
- Simple to Maintain





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DEWATERING CONTAINER FILTERS: ADVANTAGES:

- Provides Reliable Water Quality
- Reasonable Solid Waste Output





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DEWATERING CONTAINER FILTERS ADVANTAGES:

- Requires no rinse water in process
- Filtrate is very low TSS without dilution





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WHAT CHANGE SHOULD WE EXPECT?



MAKING SEWERABLE WATER





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CONTAINERIZED DEWATERING HOW ARE THEY MADE?





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**CONTAINERIZED DEWATERING
CARBON STEEL**



Different Paints, Coatings & Epoxy





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**CONTAINERIZED DEWATERING
CARBON STEEL**



Galvanized with Stainless Steel Interior!





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**CONTAINERIZED DEWATERING
STAINLESS STEEL**





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POLYWICK™ DEWATERING CONTAINER



HMWPE for all Wetted Parts!





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DEWATERING PROCESS COMPARISON





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DEWATERING PROCESS COMPARISON CHEMICAL ADDITION & PUMPING





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**DEWATERING PROCESS COMPARISON
SOLIDS PRODUCTION**





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DISCHARGE A VIABLE WATER QUALITY





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**ALTERNATE SOLUTIONS WITH POLYWICK
DEWATERING CONTAINERS**



PolyWick Water Polishing





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POLYWICK DEWATERING CONTAINERS FOR WATER POLISHING

- Some Operations Must Get Dry Solids
- Disposal Fees Sometimes Dictate Costs
- Water Quality Standards are HIGH (low values)
- Facilities Compromise Solids for Water Quality
- Facilities Compromise Water Quality for Solids
- Total Solids must be in 100-300 ppm
- Final Clarifiers are Costly





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LAD PROCESSING



FINAL INSTALLATION..TSS CLARIFICATION





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Influent to PolyWick 70-130 GPM





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Thickened "TSS" is Inside the Container





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“TSS Liquid” Inside the
PolyWick Is Recirculated





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Effluent of PolyWick





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Clean Effluent is Pumped to
Discharge Storage





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Specializing in Industrial & Municipal Solid-Liquid Separation since 1992.

LAD Processing, LLC - PolyWick Lab Results

DATE	BOD		TSS		Chloride	
	ppm-in	ppm-out	ppm-in	ppm-out	ppm-in	ppm-out
4/2/00	3,070	871	4,500	74	1,100	1,000
4/3/00						
4/4/00						
4/5/00	1,400	1,420	4,700	204	1,000	1,000
4/6/00	4,900	1,120	4,670	108	1,000	700
4/7/00	3,770	1,030	3,000	61	1,400	1,400
4/8/00						
4/9/00	4,700	1,140	3,740	138	1,000	1,100
4/10/00	711	2,400	1,000	130		
4/11/00						
4/12/00	3,700	1,240	3,000	170	400	400
4/13/00	1,500	80	1,600	80	800	80
4/14/00						
4/15/00	1,400	714	1,600	40	800	800
4/16/00	1,200	1,000	300	122	11,000	400
4/17/00	4,700	1,300	4,200	110	620	500
4/18/00						
4/19/00	1,000	1,400	1,000	140	100	100
4/20/00	700	300	2,670	140	170	100
4/21/00	4,800	1,000	3,000	30	800	400
4/22/00	1,000	1,040	4,000	20	470	300
4/23/00	602	711	600	402	100	100
4/24/00						
4/25/00						
4/26/00	3,000	270	4,000	508	100	100
4/27/00	4,000	1,000	4,000	50	700	400
4/28/00	600	411	300	130	200	200
4/29/00	11,000	1,000	4,000	300	1,000	400
4/30/00	1,000	440	1,000	130	140	100
5/1/00						
5/2/00						
5/3/00	2,400	1,120	4,000	120	400	300
5/4/00	1,000	1,000	80	300	300	400
Average	2,000	1,000	3,700	111	1,000	400
Reduction	63%		94%		54%	

www.crystalenv.com - 1-800-320-6700 - 1-814-434-0540

Effluent out of PolyWick Dewatering Container





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DEWATERING CONTAINERS PROCESSING OPTIONS

- ❖ Grease
- ❖ Septic
- ❖ Grease & Septic
- ❖ Portable Toilet
- ❖ Car Wash
- ❖ Industrial Wastes
- ❖ Process Clarification



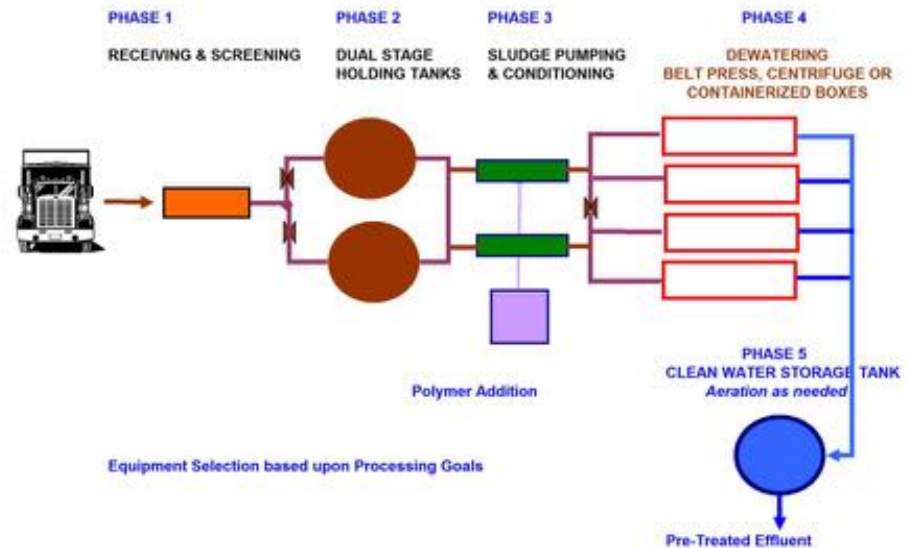


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DEWATERING CONTAINERS ARE AN INTEGRAL PART OF OUR DEWATERING PROCESSES

- Dewatering Equipment
- Chemical Addition Equipment
- Sludge Pumping & Mixing
- De-Gritting & Screening
- Bio-Filtration / Odor Control

Crystal Environmental's Layout for Pre-Treatment





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PROCESSING PLANS



CHOOSE YOUR EQUIPMENT

PERMIT SITE

MEET THE DISCHARGE
REQUIREMENTS/





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MODULATE FOR GROWTH

RECEIVING/DE-GRIT + SCREENING +

EQUALIZATION +

DEWATER +

ODOR CONTROL





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POLYWICK™ DEWATERING CONTAINER



**Thank You! Therese Wheaton
Questions?**

