Let’s Get Started -
Steps to make your Processing Plant a Reality

Presented by:
Therese Wheaton
Crystal Environmental
“Specializing in Industrial and Municipal Solids-Liquid Separation since 1992”
It’s as Clear as Mud
Flash Back --- 20 Years Ago
Pumper Show, Nashville, Tennessee
We Purchased Equipment with No Permits!
Let’s Turn Tipping Fees to Income, Legally!
Mick Torok Wanted to Build...
It was ALL About the Cost per Gallon!
Where Will The Solids and Water Go?
Processes....
Small, Medium or Large
Follow the Same Patterns for Success!
Join Us in Entering into the New Frontier... Every Site Needs a Financial Game Plan
Find a Pipeline to a Wastewater Treatment Plant
Financial Game Plan: Where?
Location of Pumping Business
Location of Processing Plant
Choose the “Best” Location!
Financial Game Plan: Where?

Potential Cost of Real Estate
Potential Cost of Building Improvements
Financial Game Plan: What Kind of Waste?

Septic?
Holding Tank?
Grease Trap?
Car Wash?
Industrial Waste?
Food Waste?
Financial Game Plan: What Kind of Waste?

How much did you “deliver”? 

Daily? 
Weekly? 
Monthly? 
Annually?
Financial Game Plan:
Private Facility or Regional Facility?
Include Other Pumpers?
Financial Game Plan: How Much Does It Cost to Dispose?

Septic?
Holding Tank?
Grease Trap?
Car Wash?
Industrial Waste?
Food Waste?
Financial Game Plan:
How Far Do You Travel to Dispose?
Septic?
Holding Tank?
Grease Trap?
Car Wash?
Industrial Waste?
Food Waste?
Financial Game Plan: Financial Resources / Interest Rates?
Financial Game Plan: Utility Costs of Facility

Electric
Heat
Communication
Financial Game Plan:
Solids Disposal Cost at Landfill
Financial Game Plan: Income for Beneficial Reuse
Financial Game Plan: Industrial Pre-Treatment Permit

Cost of Connection to Sewer
Cost of Connection to Water
Building Ordinance Costs
Meet all Local “Needs”
Financial Game Plan: Beneficial Reuse of Water

Land Application of Irrigation Water?
Ground Water Discharge Permit?
NPDES Permit?
Join Us in Entering into the New Frontier...
Every Site Needs a Financial Game Plan
Engineering & Planning A Liquid Waste Processing Facility
In Other Words...

Meet the Regulations

(It Could be a Rural Site)
Engineering & Planning
A Liquid Waste Processing Facility
Components of an Approved Permit:

- System Description
- Blue Print
- Operating Limitations
- Record Keeping & Reporting
- Facility Benefit Statement
- Appendix
System Description

• Disposal of Liquid Waste is Becoming More Stringent
• Wastewater Plants May Not be Meeting Our Needs
• Dewatering Processes have Become a Perfect Alternative
• Where will the Pre-Treated Water Go?
• Where will the Solid Waste Go?
• How Will we Operate the Facility from Start to Finish?
System Description

Crystal Environmental Flow Plan – Advanced Systems 2013

Choose the Equipment to Match.... An Engineered Blue Print May be Required
System Description

The Discharge Requirements to the Wastewater Treatment Plant or The NPDES Permit
Operating Limitations

- Domestic or Industrial Standards
  - What Type of Liquid Waste Will We Accept
- Hours of Operation
- Receiving Details & Capacity
- Discharge Details & Capacity
- Spill Containment
Record Keeping & Reporting

- Manifest Each Load into the Facility
- Secure a Grab Sample for Each Load
- Keep Records of How Much is Processed Daily
- Keep Records of How Much is Discharged Daily
- Keep Records of How Much Chemistry is Used
- Keep Records of How Much Water is Added
- The Regulators Will Provide Testing
Record Keeping & Reporting

Have an Independent Certified Laboratory
Keep Records for the Facility
# Record Keeping & Reporting

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Facility Benefit Statement

Why is it Important for the Regulators to Provide You With a Permit To Operate an Industrial Pre-Treatment Facility?
Facility Benefit Statement

...Not just because you want it!
Facility Benefit Statement

• Credentials of Your Business
• Pre-Treating Waste Reduces the WWTP’s Impact
• Pre-Treated Waste Allow the WWTP to process 10-20 Times More!
• Whose Waste Will you Accept?
• How Much Waste Will You Process?
• Environmental Impact on the Region
• Provide Solutions for Other Waste Streams:
  • Septic
  • Grease Trap
  • Portable Toilet Waste
  • Car Wash
  • Industrial Waste Streams
  • Package Plant Waste
Appendix

- Physical & Chemical Properties of Waste
  - Septic
  - Grease Trap
  - Portable Toilet Waste
  - Car Wash
  - Industrial Waste Streams
  - Package Plant Waste
Appendix
Physical & Chemical Properties of the Pre-Treated Discharge

What is the Anticipated Water Quality?
Appendix

Physical & Chemical Properties

What is the Anticipated Solids Quality?
References

Who has a similar facility?

What are the REASONS for SUCCESS?
Thank You!
QUESTIONS?

Therese Wheaton
Crystal Environmental
800-328-9720

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