

KIF Gypsum Disposal - Responsibilities Matrix - May 11, 2007

Description	Engineering Design	Construction	Operate & Maintain
Gypsum Slurry Pipeline			
From Powerhouse to Bypass Valve	Advatech	Advatech	TVA-Plant
From Bypass Valve to Dewatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatech	Advatech	TVA-Plant
By-Pass Valve	Advatech/Gyp Marketer	Advatech/Gyp Marketer	TVA-Plant
By-Pass Valve Controls (Note 4)	Gyp Marketer	Advatech	Gyp Marketer (Highly Coordinated with TVA)
Gypsum Dewatering Facility			
Gypsum Dewatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
Rough (initial) Grading of the Area	TVA-FES (with input from Marketer)	HED	N/A
Site Development of Gyp Dewatering Facility (Final Grading, Drainage, Roads & Parking within the Gyp Marketer area)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Stormwater Pipeline from Dewatering Facility to Gypsum Pond	Gyp Marketer	Gyp Marketer	Gyp Marketer
Filtrate Pipeline from Dewatering Facility Back to Effluent Lines	Gyp Marketer	Gyp Marketer	Gyp Marketer
Dry Gypsum Stockout (Pole Barn)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Conveyor to Barge Loader	Gyp Marketer	Gyp Marketer	Gyp Marketer
Potable Water Supply (Note 1)	Gyp Marketer/TVA	Gyp Marketer/TVA	Gyp Marketer
Raw Water (Note 1)	Gyp Marketer/TVA	Gyp Marketer/TVA	Gyp Marketer
Power Supply to Gypsum Dewatering Facility (Note 2)	Advatech (with power requirement from Marketer)	Advatech	TVA-Plant
Marketer Transformer (Provide Oil Containment)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Sewage/Septic (Note 3)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Access Road to Gyp Dewatering Facility	TVA(use existing as much as practicable)	HED(use existing as much as practicable)	TVA-Plant
Fence/Gate (Optional-May Be Req'd at a later date)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Transport (Hauling) from Dry Gypsum Stockout (Pole Barn) (Emergency Only)	n/a	n/a	Gyp Marketer haul to barge loader or gyp pond (emergency short term)
Permitting - (Note 6)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Fire Protection	TBD	TBD	TBD
Security/Access/Badging of Marketer (across plant property)	KIF	KIF	KIF
Develop Dock for Gyp Barges	Gyp Marketer	Gyp Marketer	Gyp Marketer
Truck Route thru plant	TVA	TVA	TVA

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Description	Engineering Design	Construction	Operate & Maintain
Scenario 1 Gypsum Disposal Area (Expected Operation)			
Gypsum Disposal Area	TVA - FES	HED	TBD
Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stormwater/SED Pond (as needed)	n/a	n/a	Yard Ops
Road from Dewatering Facility to Gypsum Pond/Disposal Area	TVA - FES	HED	TBD
Underdrain Lift Station	Advatech	Advatech	Yard Ops
Pumps/Pipe/Platform from Stormwater/Sed Pond to Plant Discharge Channel	Advatech	Advatech	Yard Ops
Power Feed to Pumps (Sed Pond(s))	Advatech	Advatech	Yard Ops
Scenario 2 Gypsum Disposal Area (Market Failure) Drying System is By-Passed or not built			
Gypsum Disposal Area	TVA - FES	HED	Yard Ops
Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stormwater/SED Pond (as needed)	n/a	n/a	Yard Ops
Road from Dewatering Facility to Gypsum Pond/Disposal Area	TVA - FES	HED	Yard Ops
Underdrain Lift Station	Advatech	Advatech	Yard Ops
Pumps/Pipe from Stormwater/Sed Pond/Platform to Plant Discharge Channel	Advatech	Advatech	Yard Ops
Power Feed to Pumps (Sed Pond(s))	Advatech	Advatech	Yard Ops
Pipeline From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatech	Advatech	TVA
By-Pass Valve	Advatech	Advatech	TVA - Locked to divert to Disposal Facility

Note 1 - TVA & Gyp Marketer to negotiate most practical approach to providing these utilities.

Note 2 - Pending Harriman Utility Board Agreement on metering

Note 3 - Septic System If permitted by State

Note 4 - Marketer may be required to provide instrument air & control power

Note 5 - TVA to provide capacity in sediment pond for stormwater from marketers area

Note 6 - With the exception of SWPPP, NPDES, Corps, and 26a permits by TVA

Marketer Electrical Power Requirement: 500 amp, 480 volt, 3-phase power.

May accept higher voltage to their transformer.

KIF Gypsum Disposal - Responsibilities Matrix - Oct 27, 2005

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Gypsum Slurry Pipeline			
From Powerhouse to Bypass Valve	Advatech	Advatech	TVA-Plant
From Bypass Valve to Dewatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatech	Advatech	TVA-Plant
By-Pass Valve	Advatech	Advatech	TVA-Plant
By-Pass Valve Controls (Note 4)	Advatech	Advatech	TVA(Highly Coordinated with Gyp Marketer)
Gypsum Dewatering Facility			
Gypsum Dewatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
Rough (initial) Grading of the Area	TVA-FES (with input from Marketer)	HED	N/A
Site Development of Gyp Dewatering Facility (Final Grading, Drainage, Roads & Parking within the Gyp Marketer area)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Stormwater Pipeline from Dewatering Facility to Gypsum Pond	Gyp Marketer	Gyp Marketer	Gyp Marketer
Filtrate Pipeline from Dewatering Facility to Gypsum Pond	Gyp Marketer	Gyp Marketer	Gyp Marketer
Dry Gypsum Stockout (Pole Barn)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Conveyor to Barge Loader	Gyp Marketer	Gyp Marketer	Gyp Marketer
Potable Water Supply (Note 1)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Raw Water (Note 1)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Power Supply to Gypsum Dewatering Facility (Note 2)	Advatech (with power requirement from Marketer)	Advatech	TVA-Plant
Marketer Transformer (Provide Oil Containment)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Sewage/Septic (Note 3)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Access Road to Gyp Dewatering Facility	TVA(use existing as much as practicable)	HED(use existing as much as practicable)	TVA-Plant
Fence/Gate (Optional-May Be Req'd at a later date)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Transport (Hauling) from Dry Gypsum Stockout (Pole Barn) (Emergency Only)	n/a	n/a	Gyp Marketer haul to barge loader or gyp pond (emergency short term)
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Security/Access/Badging of Marketer (across plant property)	KIF	KIF	KIF
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Description	Engineering Design	Construction	Operate & Maintain
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Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stormwater/SED Pond (as needed)	n/a	n/a	Yard Ops
Road from Dewatering Facility to Gypsum Pond/Disposal Area	TVA - FES	HED	TBD
Pumps/Pipe from Stormwater/Sed Pond to Plant Discharge Channel	TVA - FES	HED	Yard Ops
Power Feed to Pumps (Sed Pond(s))	Advatech (given the power load from FES)	Advatech	Yard Ops
Scenario 2 Gypsum Disposal Area (Market Failure) Drying System is By-Passed or not built			
Gypsum Disposal Area	TVA - FES	HED	Yard Ops
Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stormwater/SED Pond (as needed)	n/a	n/a	Yard Ops
Road from Dewatering Facility to Gypsum Pond/Disposal Area	TVA - FES	HED	Yard Ops
Pumps/Pipe from Stormwater/Sed Pond to Plant Discharge Channel	TVA - FES	HED	Yard Ops
Power Feed to Pumps (Sed Pond(s))	Advatech (given the power load from FES)	Advatech	Yard Ops
Pipeline From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatech	Advatech	TVA
By-Pass Valve	Advatech	Advatech	TVA - Locked to divert to Disposal Facility

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