KIF Gypsum Pond Mtg

10/27/05

Bob Rehberg LINDA CAMPBELL Earl Destins CHER, MILLER LATZEN NATTHAN STONG BANKA STONG BANKA STAN HABER LANY, BOWES DAVE ROJONOS DAVE ROJONSON Tim Lee TOM Myers BEN O'BRIEN DAN SMOTH RON FURKEY LINN PETTY

KIF FOD KIF (PAE) KIF FUEL BY-PRODUCTS FUEL BY-PRODUCTS TVA-FPG-NGP FUEL BY-PRODUCTS FEATS FEATS EH EVA-FPG-NGPropets TVA-FPG-NGPropets KIF-FGD

WORLEY PARSONS TUB EDS 717-2187 717-2157 717-2500 423-757-4419 2555090239 4035751-4419 4035751-6(37) 4035751-3838 4035751-3838 423-751-2502 423-751-4483 423-257-3415 423-757-8088423757-8088

TVA-00007847

Suggested Agenda

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KIF – Gypsum Marketers Area Coordination Meeting Plant Manager's Conference Room 10:00 AM – Noon 10/27/05

Purpose of the meeting is to review the Gypsum Pond and Dewatering Facility Layout and coordinate stackholder's needs for the area.

- 1. Review of overall layout and proposed operation Dan Smith
- Review of layout of Preliminary Sediment Pond/Marketers Area Drawing Dan Smith Acreage Needs Geometry/Orientation Needs Access Needs Redline mark-up of drawing
- 3. Review of Matrix of Responsibilities Lynn Petty
- 4. Action Items All
- 5. Walkdown of site All

Petty, Harold L.

Message

From: Miller, Evelyn C.

Sent: Tuesday, October 25, 2005 2:36 PM

To: Latsch, Mitchell D.

Cc: Baugh, James S.; Myers, Thomas J.; Petty, Harold L.

Subject: RE: KIF Gypsum Marketer Power Requirements

According to the KIF Responsibility Matrix I thought it had been decided that we are providing the power there since we have to bring power out there for our pumps and the valve station anyway. The power requirements will be the same as identified for PAF/BRF/COF, etc. SynMat has a fairly standard design for all four facilities which requires the following as outlined in their response to TVA's RFP:

Electrical Power: 500 amp, 480 volt, 3-phase power. May accept higher voltage to their transformer.

Process Water: a total of up to 120 gpm of river water with a temp range from 40-105 F

Potable Water: acquired through local municipal service where practical of kept in tanks onsite

Diesel Fuel: purchased from regional bulk distributor

Waste Disposal: arranged from regional company specializing in providing these services

Sewage: either through local municipal provider or through Porto-John and/or holding tanks

-----Original Message----- **From:** Latsch, Mitchell D. **Sent:** Tuesday, October 25, 2005 2:19 PM **To:** Miller, Evelyn C. **Cc:** Baugh, James S.; Myers, Thomas J. **Subject:** KIF Gypsum Marketer Power Requirements

Cheri,

Can you find out how much power that Synmat is expected to require for their process needs at Kingston?

Also, someone needs to approach the local power distributor up there to see if they want to provide power to Synmat's facility - do you want to do that or would you prefer that I initiate that inquiry?

This information is needed fairly quickly to support the assessment of where and how power is to be supplied for all the various equipment in that area of the reservation.

Let me know your answer(s) as soon as you are able.

Thanks,



Mitchell Latsch

Project Engineer PAF U3, BRF U1 and KIF U1-9 FGD Scrubber Projects Chemical Engineer, Mechanical Engineering Office Phone: (423) 751-7008 email: <u>mdlatsch@tva.gov</u>

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Gypsum Disposal - Responsibilities Matrix - Oct 19, 2005 VIE

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		Engineering	Construction	Operate & Maintain
De	scription	Design	Construction	
Gvp	sum Slurry Pipeline	The second second second	. 그 씨 집에서는 같은.	
	n Powerhouse to Bypass			
Valv		Advatech	Advatech	TVA-Plant
Fror	n Bypass Valve to			
Dew	vatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
Fror	m Bypass Valve to Gypsum			TVA Diant
Pon	d (Wet Sluicing)	Advatech	Advatech	TVA-Plant
By-F	Pass Valve	Advatech	Advatech	TVA(Highly
	Nore 9		l	Coordinated with Gyp
By-I	Pass Valve Controls	Advatech	Advatech	
	osum Dewatering Facility			Gyp Marketer
Gyp	osum Dewatering Facility	Gyp Marketer	Gyp Marketer	
	ugh (initial) Grading of the	TVA-FES (with input	HED	N/A
Are		from Marketer)		
🕺 De	Development of Gyp watering Facility (Final			
Gra	ading, Drainage, Roads &			
Par	king within the Gyp Marketer			Our Markotor
are		Gyp Marketer	Gyp Marketer	Gyp Marketer
Wa	ste Water Pipeline from			
F Por	watering Facility to Gypsurn	Gyp Marketer	Gyp Marketer	Gyp Marketer
e De	cant Pipeline from watering Facility to Gypsum			
	-	Gyp Marketer	Gyp Marketer	Gyp Marketer
Pol	y Gypsum Stockout (Pole			
Ba	· · ·	Gyp Marketer	Gyp Marketer	Gyp Marketer
	nveyor to Barge Loader	Gyp Marketer	Gyp Marketer	Gyp Marketer
	table Water Supply (Note 1)	Gyp Marketer	Gyp Marketer	Gyp Marketer
	w Water (Note 1)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Ha	IN VARIES (NOLE I)	Advatech (with power	<u> </u>	
Do	wer Supply to Gypsum	requirement from		1
	watering Facility (Note 2)	Marketer)	Advatech	TVA-Plant
	arketer Transformer (3000)		Gyp Marketer	Gyp Marketer
	wage/Septic (Note 3)	Gyp Marketer	Gyp Marketer	Gyp Marketer
	cess Road to Gyp	TVA(use existing as	HED(use existing as	
	ewatering Facility	much as practicable)	much as practicable)	TVA-Plant
	nce/Gate (Reg'd) Offic non	Gyp Marketer	Gyp Marketer	Gyp Marketer
Tr Gy	ansport (Hauling) from Dry ypsum Stockout (Pole Barn) mergency Only)	n/a	n/a	Gyp Marketer haul to barge loader or gyp pond (emergency sh term)
M	ecurity/Access/Badging of arketer (across plant property	n) KIF	KIF	KIF
	Rom TING . Norr G	GME	ar wa	Gp m

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Scenario 1 Gypsum Disposal		and another starting to starting the	
Area (Expected Operation)			
Gypsum Disposal Area	TVA - FES	HED	TBD
Stormwater (Surge) Pond	TVA - FES	HED	HED/Yard Ops
Cleanout of Stomwater/SED	n/a	n/a	
Pond (as needed)	11/a	11/2	GED/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	BED/Yard Ops
	Advatec (given the		
Power Feed to Pumps	power load from FES)	Advatech	PYard Ops
Scenario 2 Gypsum Disposal			
Area (Market Failure) Drying			
System is By-Passed or not			A CONTRACTOR OF
built			
Gypsum Disposal Area	TVA - FES	HED	HED/Yard Ops
Stormwater (Surge) Pond	TVA - FES	HED	RED/Yard Ops
Cleanout of Stomwater/SED	n/a	n/a	
Pond (as needed)		1.50	AED/Yard Ops
Road from Dewatering Facility			
to Gypsum Pond/Disposal Area	TVA - FES	HED	HEO/Yard Ops
Pumps/Pipe from			
Stormwater/Sed Pond to Plant			
Discharge Channel	TVA - FES	HED	HED/Yard Ops
	Advatec (given the	,	
Discharge Channel Power Feed to Pumps		HED Advatech	HED/Yard Ops HED/Yard Ops
	Advatec (given the	,	
Power Feed to Pumps	Advatec (given the	,	
Power Feed to Pumps Pipeline From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatec (given the power load from FES)	Advatech	HED/Yard Ops
Power Feed to Pumps Pipeline From Bypass Valve to	Advatec (given the power load from FES)	Advatech	HED/Yard Ops
Power Feed to Pumps Pipeline From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatec (given the power load from FES) Advatech	Advatech Advatech	HED/Yard Ops TVA TVA - Locked to divert

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

Note 2 - Pending Harriman Utility Board Agreement on metering .

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Note 3 - Septic System If permitted by TDEC - STATE INST AIR + REQUIND to PROVIOU Norra - MANN MAY BE CONTROL POWER Noves -PRIVIDE COMPALITY AVT IN SED Nort G - Exam Or ton Sum Rn SWPPO + NPDET + CONO 2, PORMAN Ebz, F FIRS PROTECT TBD アワ TBN

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KIF Gypsum Disposal - Responsibilities Matrix - Oct 27, 2005

	Engineering		Operate &
Description	Design	Construction	Maintain
	U		
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
			TVA(Highly
By Base Value Centrole (Note 4)	A shuada a b	A shares all	Coordinated with Gyp
By-Pass Valve Controls (Note 4)	Advatech	Advatech	Marketer)
Gunsum Dowatoring Faaility			Contraction of the second
Gypsum Dewatering Facility Gypsum Dewatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
Rough (initial) Grading of the	TVA-FES (with input		
Area	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
	Advatech (with power		
Power Supply to Gypsum	requirement from	A -t 1-	
Dewatering Facility (Note 2) Marketer Transformer (Provide	Marketer)	Advatech	TVA-Plant
•	Cum Marketor		Cup Marketer
Oil Containment)	Gyp Marketer Gyp Marketer	Gyp Marketer	Gyp Marketer
Sewage/Septic (Note 3) Access Road to Gyp	TVA(use existing as	Gyp Marketer HED(use existing as	Gyp Marketer
Dewatering Facility	much as practicable)	much as practicable)	TVA-Plant
Fence/Gate (Optional-May Be	maon ao praoticable)		
Req'd at a later date)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Transport (Hauling) from Dry			Gyp Marketer haul to
Gypsum Stockout (Pole Barn)		,	barge loader or gyp
(Emergency Only)	n/a	n/a	pond (emergency shor
			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
Scenario 1 Gypsum Disposal			
Area (Expected Operation)			
Gypsum Disposal Area	TVA - FES	HED	TBD

Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stomwater/SED		- 1-	
Pond (as needed)	n/a	n/a	Yard Ops
Road from Dewatering Facility			
	TVA - FES	HED	TBD
Pumps/Pipe from			
Stormwater/Sed Pond to Plant			
Discharge Channel	TVA - FES	HED	Yard Ops
Power Feed to Pumps (Sed	Advatech (given the		
Pond(s))	power load from FES)	Advatech	Yard Ops
Scenario 2 Gypsum Disposal	and the second		
Area (Market Failure) Drying			
System is By-Passed or not		the second s	
built		A CONTRACTOR OF	
Gypsum Disposal Area	TVA - FES	HED	Yard Ops
Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stomwater/SED	- 1-		
Pond (as needed)	n/a	n/a	Yard Ops
Road from Dewatering Facility			
	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	Advatech (given the		
		HED Advatech	Yard Ops Yard Ops
Power Feed to Pumps (Sed Pond(s))	Advatech (given the		
Power Feed to Pumps (Sed Pond(s)) Pipeline From Bypass Valve to	Advatech (given the power load from FES)	Advatech	Yard Ops
Power Feed to Pumps (Sed Pond(s))	Advatech (given the		Yard Ops
Power Feed to Pumps (Sed Pond(s)) Pipeline From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatech (given the power load from FES) Advatech	Advatech Advatech	Yard Ops TVA TVA - Locked to divert
Power Feed to Pumps (Sed Pond(s)) Pipeline From Bypass Valve to	Advatech (given the power load from FES)	Advatech	Yard Ops
Power Feed to Pumps (Sed Pond(s)) Pipeline From Bypass Valve to Gypsum Pond (Wet Sluicing)	Advatech (given the power load from FES) Advatech	Advatech Advatech	Yard Ops TVA TVA - Locked to divert

Note 1 - TVA & Gyp Markerter 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 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.

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KIF Gypsum Disposal - Responsibilities Matrix - Oct 27, 2005

	Engineering		Operate &
Description	Design	Construction	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	Advatech	TVA-Plant
			TVA(Highly Coordinated with Gyp
By-Pass Valve Controls	Advatach	Advatech	Marketer)
Gypsum Dewatering Facility	Advatech	Advatech	
Gypsum Dewatering Facility	Gyp Marketer	Gyp Marketer	Gyp Marketer
Rough (initial) Grading of the	TVA-FES (with input		
Area	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
aidaj	Gyp Marketer		
Decant Pipeline from Dewatering			
facility to Gypsum Pond	Gyp Marketer	Gyp Marketer	Gyp Marketer
racinty to Gypsum Fond			
Filtrate Pipeline from Dewatering			
Facility to Gypsum Pond	Gyp Marketer	Gyp Marketer	Gyp Marketer
racinty to Gypsum Fond	Gyp Warketer	Gyp Marketer	
Dry Gypsum Stockout (Pole Barn)	Gvn 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
Fire protection water	TBD	TBD	TBD
ine protection water	Advatech (with power		
Power Supply to Gypsum	requirement from		
Dewatering Facility (Note 2)	Marketer)	Advatech	TVA-Plant
Marketer Transformer (provide			
containment)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Sewage/Septic (Note 3)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Access Road to Gyp Dewatering	TVA(use existing as	HED(use existing as	
Facility	much as practicable)	much as practicable)	TVA-Plant
Fence/Gate (if Req'd)	Gyp Marketer	Gyp Marketer	Gyp Marketer
Transport (Hauling) from Dry			Gyp Marketer haul to
Gypsum Stockout (Pole Barn)			barge loader or gyp
(Emergency Only)	n/a	n/a	pond (emergency shor
			term)
Security/Access/Badging of			
Marketer (across plant property)	KIF	KIF	KIF
	I INE		

Scenario 1 Gypsum Disposal			
Area (Expected Operation)			
Gypsum Disposal Area	TVA - FES	HED	TBD
Stormwater (Surge) Pond	TVA - FES	HED	Yard Ops
Cleanout of Stomwater/SED	n/a	n/a	
Pond (as needed)	n/a	11/d	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
	Advatech (given the		
Power Feed to Pumps	power load from FES)	Advatech	Yard Ops
Scenario 2 Gypsum Disposal		Contraction and the second	
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 Stomwater/SED	n/a	n/a	
Pond (as needed)	II/a	11/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
	Advatec (given the		
Power Feed to Pumps	power load from FES)	Advatech	Yard Ops
Pipeline From Bypass Valve to			
Gypsum Pond (Wet Sluicing)	Advatech	Advatech	TVA
			TVA - Locked to divert
By-Pass Valve	Advatech	Advatech	to Disposal Facility
· · · · · · · · · · · · · · · · · · ·			

Note 1 - TVA& Gyp Markerter 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 of Tennessee

Note 4 - SynMat may need to provide instrument air and control power.

Note 5 - TVA to provide capacity in stormwater pond for dewatering facility.

Notes from KIF Dewatering facility meeting 10/27/05

- 1. Laydown area at dewatering facility (approx 2 ac) is not needed by the Scrubber project.
- 2. Area allotted for dewatering facility as depicted on sketch SK TAO0323 05 is sufficient.
- 3. TVA FES can proceed with design based on the layout depicted on SK TAO0323 05. Modifications within the footprint area shown will be made later by SynMat.
- 4. John Glasscock will make site visit to KIF within a couple of weeks.
- 5. Based on preliminary information, up to 4 barges per day would be loaded at KIF.
- 6. Would like to maintain treeline, and remove dead trees to the extent that no new facilities would be impacted by fallen trees.
- 7. Multiple projects being managed at this time from the TVA gypsum marketing efforts.
- 8. TVA FES will develop a more detailed grading drawing of the gypsum dewatering facility, and will foreward this directly to John Glasscock for further coordination.

Action Items

- 1. Electrical to determine direct burial vs overhead
- 2. WorleyParsons to develop preliminary grading plan for SynMat
- 3. Cheri Miller to look at fire protection needs with SynMat.