# KIF Gypsum Pond Mtg 10/27/05

| | | |
|---|---|---|
| Bob Rehberg | KIF FGD | 717-2187 |
| LINDA CAMPBELL | KIF (PAE) | 717-2157 |
| Earl Destins | KIF | 717-2500 |
| CHERI MILLER | FUEL BY-PRODUCTS | 423-751-4419 |
| LARRY NATHAN | TVA-FPG-NGP | 2565090239 |
| STEVE BRAUCH | FUEL BY-PRODUCTS | 423 751-6137 |
| STAN HABER | FE&TS | 423.751.3838 |
| Larry Bowers | EH | 423 751-4849 |
| DAVE ROBINSON | EP+P | 423-751-2502 |
| Tim Lee | TVA-FPG-NGProjects | 423-751-4483 |
| Tom Myers | TVA-FPG-NGAspects | 423-251-3415 |
| BEN O'BRIEN | KIF-FGD | 423-2273123 |
| DAN SMITH | WORLEY PARSONS | 423 757-8088 |
| RON PURKEY | TVA EDS | 423 757 4820 |
| LYNN PUTTY | | |

Suggested Agenda

**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

2. 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.

**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: mdlatsch@tva.gov***

SEE BACK

# DRAFT

## KIF Gypsum Disposal - Responsibilities Matrix - Oct 19, 2005

| 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 | 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 |
| ~~Waste Water~~ Pipeline from Dewatering Facility to Gypsum Pond | Gyp Marketer | Gyp Marketer | Gyp Marketer |
| ~~Decant~~ 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 (SHARE) | 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 ~~(Req'd)~~ OPTIONAL | 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) |
| Security/Access/Badging of Marketer (across plant property) IF | KIF | KIF | KIF |

PERMITTING - NOTE 6 GYP GYP MK GYP MK

| | | | |
|---|---|---|---|
| **Scenario 1 Gypsum Disposal Area (Expected Operation)** | | | |
| Gypsum Disposal Area | TVA - FES | HED | TBD |
| Stormwater (Surge) Pond | TVA - FES | HED | HED/Yard Ops |
| Cleanout of Stomwater/SED Pond (as needed) | n/a | n/a | HED/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 | HED/Yard Ops |
| Power Feed to Pumps | Advatech (given the power load from FES) | Advatech | HED/Yard Ops |
| **Scenario 2 Gypsum Disposal Area (Market Failure) Drying System is By-Passed or not built** | | | |
| Gypsum Disposal Area | TVA - FES | HED | HED/Yard Ops |
| Stormwater (Surge) Pond | TVA - FES | HED | HED/Yard Ops |
| Cleanout of Stomwater/SED Pond (as needed) | n/a | n/a | HED/Yard Ops |
| Road from Dewatering Facility to Gypsum Pond/Disposal Area | TVA - FES | HED | HED/Yard Ops |
| Pumps/Pipe from Stormwater/Sed Pond to Plant Discharge Channel | TVA - FES | HED | HED/Yard Ops |
| Power Feed to Pumps | Advatec (given the power load from FES) | Advatech | HED/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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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 ~~TDEC~~ STATE

NOTE 4 - MAIN MAY BE REQUIRED TO PROVIDE INST AIR & CONTROL POWER

NOTE 5 - TVA PROVIDES CAPACITY IN SED

NOTE 6 - EXCLUDES SWPPP + NPDES + COND POLISHING

FIRE PROTECT TBD TBD TBD

HLP

## KIF Gypsum Disposal - Responsibilities Matrix - Oct 27, 2005

| 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 | 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) |
| 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 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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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.


# DRAFT

## KIF Gypsum Disposal - Responsibilities Matrix - Oct 27, 2005

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|---|---|---|---|
| | | | |
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| 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 | 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 |
| Decant 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 |
| Fire protection water | TBD | TBD | TBD |
| Power Supply to Gypsum Dewatering Facility (Note 2) | Advatech (with power requirement from 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 Facility | TVA(use existing as much as practicable) | HED(use existing as much as practicable) | TVA-Plant |
| Fence/Gate (if Req'd) | 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) |
| Security/Access/Badging of Marketer (across plant property) | KIF | KIF | KIF |

| | | | |
|---|---|---|---|
| **Scenario 1 Gypsum Disposal Area (Expected Operation)** | | | |
| Gypsum Disposal Area | TVA - FES | HED | TBD |
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| 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 | 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 | Advatec (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 |
| | | | |
| | | | |

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.