

March 6, 2006

H. Lynn Petty, LP 2G-C
Ronald E. Purkey, LP 2G-C

OUT OF THE VALLEY TRAVEL AUTHORIZATION - FOSSIL POWER GROUP –
FOSSIL ENGINEERING AND TECHNICAL SERVICES - ENGINEERING DESIGN
SERVICES

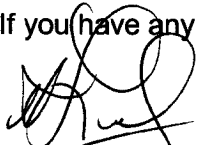
You are hereby authorized to travel to Kennesaw, Georgia, to visit Geosyntec for a 30% design review on the Kingston Fossil Plant gypsum storage area design.

You are directed to claim **actual expenses**. Ordinarily you are expected to travel within the GSA standard or locality rate for the area visited. In unusual circumstances and, if **approved in advance** by a direct report to me, you may claim actual expenses up to 150 percent of the applicable GSA rate.

If you use your private automobile, you will be reimbursed the TVA rate of 36 cents/mile. In instances of an employee with an assigned vehicle using their private vehicle, the reimbursement rate will be 10.5 cents/mile. In certain circumstances, reimbursement may be allowed at the higher mileage rate of 40.5 cents/mile if approved by a direct report to me.

This authorization begins on March 15, 2006 and ends on March 15, 2006.

If you have any questions, please contact my office.



Dennis L. Lundy, Manager
Engineering Design Services
LP 2G-C

REP:SRF

cc: M. A. Cooper, LP 3K-C

Petty, Harold L.

From: NDavies@GeoSyntec.com
Sent: Wednesday, January 11, 2006 3:43 PM
To: Petty, Harold L.
Cc: TEIkady@GeoSyntec.com; JHargrove@GeoSyntec.com
Subject: Operation of Phase I - Kinston Gypsum Stack

Lynn:

I have been giving further thought to the operational sequence on both Phase I and Phase II and would appreciate your thoughts/input on the following. I left you a voice message on this, but hopefully the following notes will clarify things.

For clarity, I will refer to a couple of the drawings that I left with you on Monday:

- Referring to Dwg 1A:
 - We discussed having an initial soil starter dike to form the initial Phase I pond. The grades shown on Dwg. 1A indicate the outer dike constructed to elevation of the initial bench. My thoughts are that this serves several purposes: (i) it works as a convenient haul/access road; (ii) in the final configuration, it would become the surface water conveyance ditch routing water back to the stormwater pond (this is the reason it slopes back to the stormwater pond); (iii) it may also be the platform where we transition to a rim ditch operation.
 - Considering this outer dike, my thought is that we construct the low end entirely of soil to about EL 768 (left side of the drawing, adjacent to stormwater pond). Then, as the dike starts to increase in elevation, we top it out at EL 780 in soil (on the side of the cell that is adjacent to the river). Above 780 would then be constructed from gypsum. On the opposite side (abutting the hillside), we would construct from soil only.
 - The initial gypsum portion of the dike could be constructed as a wet cast operation by reclaiming courser materials from the pond OR we could go to a rim ditch operation. My thinking is that this would be constructed as wet cast.
 - The dike that forms the boundary between Phase I and II would be a soil dike up to EL 780, and above this elevation it would be gypsum up to the highest point.
 - Phase I would be operated as a wet pond, reclaiming courser gypsum to construct the dikes up to the top elevations shown on Dwg 1A

Questions:

- ✓ ■ Does this seem like a viable operation? (i.e., wet cast gypsum to raise the dikes to these elevations)
- ✓ ■ Do you think that transitioning to full rim ditch operation at the level of this first bench is the appropriate point?
 - Note that we have sloped the benches at a min of 1% to provide surface water drainage back to the stormwater pond. If you look at Dwg 2A, you will see that we have sloped all benches (shown shaded) back toward the stormwater pond. There would then be a "downspout" or rip-rap ditch running up the ridge to drop stormwater into the stormwater pond. This is the typical way we have handled stormwater, but I noticed on Bull Run that all the benches are level and feed a single perimeter ditch (at the base) to convey stormwater to the pond. Is there a reason for this? Do you prefer to run the rim ditches on a level plane or is it better to have fall (say 1%) along the rim ditch?

- Referring to Dwg 2B:
 - Right now, we are showing Phase II occurring after Phase I is built out to some elevation (we need to select an elevation lower than what is currently shown). However, during our recent meeting there was some discussion that if marketing does not go well initially, an early decision may be made to build out Phase II. Would you prefer us to show this "as drawn" or show Phase II occurring with Phase I at a much lower elevation?

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- Considering the operation of Phase II, I was thinking of a similar approach to that described above for Phase I, i.e.,
 - Construct the soil starter dike to EL 780 (river side), but then transition up to EL 816 as it goes up the hillside.
 - Raise the dikes to the level of the first bench (grades shown on Dwg 2B) using a wet cast operation. This then ties in to the first bench of Phase I and provides a minimum grade of 1% back to the stormwater pond for surface water conveyance after closure.
 - Go to full rim ditch operations above the level of the first bench

Lynn – I hope this makes sense to you and would appreciate your feedback on this. If you can give me a call at your convenience, I will talk you through this while looking at the drawings.

Thanks
Neil

R. Neil Davies, C.Eng., MICE, P.E.
Principal/Branch Manager

GeoSyntec Consultants, Inc.
1255 Roberts Blvd. Suite 200
Kennesaw, GA 30144

phone: 678-202-9500
direct: 678-202-9545
fax: 678-202-9501

www.geosyntec.com

01/12/2006

TVA-00003559

Petty, Harold L.

From: Purkey, Ronald E.
Sent: Thursday, January 12, 2006 7:34 AM
To: GEOSYNTEC CONSULTANTS INC; Petty, Harold L.
Subject: RE: TVA Kingston Gypsum Project

Neil,
Thanks for the report. I'm OK with the funding discussion.
Ron

-----Original Message-----

From: NDavies@GeoSyntec.com [mailto:NDavies@GeoSyntec.com]
Sent: Wednesday, January 11, 2006 6:04 PM
To: Purkey, Ronald E.; Petty, Harold L.
Subject: TVA Kingston Gypsum Project

Ron and Lynn:

Thank you for taking the time to meet with us on Monday. It was very helpful to get some preliminary feedback on the direction we are taking with the design. Today I forwarded some more detailed questions to Lynn regarding the proposed mode of operation, height of starter dikes etc.. I would appreciate TVA's feedback on that as soon as convenient.

During our meeting on Monday you asked for a financial update on the project. As of Sunday, January 8, our project effort is as follows:

- Total effort (time and expenses) \$20,546
- This represents about 29% of our total authorized budget of \$69,077

In discussions you asked us to do a little more seepage analysis to evaluate the impacts of the central drainage gallery. As of now, I believe we can do this within our authorized budget. Our currently authorized budget includes a small allowance for some supplemental testing and an allowance for assistance with ARAP issues. I do not believe we will need to do the testing during this initial phase of work. Also, we have not been asked to do anything in support of ARAP at this time. Rather than asking for any additional funds at this point, I would propose that we see where we are at in another week or so and re-allocate some of the funds associated with these efforts (if needed). Please let me know if you disagree.

Please let me know if you need any additional details on the project financial or any other issues.

Best regards
Neil

R. Neil Davies, C.Eng., MICE, P.E.
Principal/Branch Manager

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1255 Roberts Blvd. Suite 200
Kennesaw, GA 30144

phone: 678-202-9500
direct: 678-202-9545
fax: 678-202-9501

www.geosyntec.com

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INTENT TO ISSUE

1 YR BEFORE CONST.

ARAP 404 BEFORE IT

PPD