

|                                                                                                                                                                                                       |                                                                                 |                              |                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|
| <b>ARDAMAN &amp; ASSOCIATES, INC.</b><br><b>PROGRESS MEETING REPORT FOR</b><br><b>PINEY POINT GYPSUM STACK SYSTEM CLOSURE</b>                                                                         |                                                                                 | File No.: 06-110A            | Page 1 of 5                                                                               |
|                                                                                                                                                                                                       |                                                                                 | Meeting Date: <u>8/14/08</u> |                                                                                           |
|                                                                                                                                                                                                       |                                                                                 | Report No: <u>175</u>        | Report Date: <u>8/20/08</u>                                                               |
| Project Name:                                                                                                                                                                                         | <b>CLOSURE CONSTRUCTION -SCP &amp; BASIN 2, FIRST 50% AND STACK CREST ROADS</b> |                              | Project Address: 13300 U.S. Highway 41 North<br>Palmetto, Florida 34221<br>Manatee County |
| <b>ATTENDEES:</b><br>Ardaman: John Cameron, Tony Deatherage<br>FDEP:<br>CDM: Mike Cruz, Jean Wilson, George Curry<br>Comanco: Paul Moore<br>Compass: Tim Morrow, Jeremy Giles<br>HRK/ECT: Jeff Barath |                                                                                 |                              |                                                                                           |

**COPY TO:** FDEP: Phil Coram, Sam Zamani, John Coates  
 Ardaman: Nadim Fuleihan, Rob Werner, Tom Leto, John Cameron, Tony Deatherage  
 CDM: Dean Carter, Michael Edgar, Michael Cruz, Dick Slovarp, Jean Wilson  
 Comanco: Tom Topp, Paul Moore  
 Compass: Tim Morrow, Jeremy Giles  
 HRK: Art Roth, Ivan Nance

***Next Meeting is Scheduled for THURSDAY, August 21, 2008***  
***Site Tour at 8:00 am followed by***  
***Construction/Engineering and CDM Operations Meetings***

**1.0 REVIEW MINUTES OF PREVIOUS MEETING**

- No corrections were reported.

**2.0 SAFETY**

- No incidents were reported.

**3.0 SUMMARY OF WORK PERFORMED**

**Compass**

- Continued grading soil cover on liner in the SCP Basin II and north ditch and on the slope of Basin II west dike.
- Continued hauling borrow material from Larkin to the First 50 % Plant Watershed Area and OGS-S crest road cover, continued grading and compacting fill for the first 50% Plant Watershed Area, and continued soil cover placement on the lined crest road of the OGS-S Compartment. Hauled material is estimated by truck count at 54,754 cy to the First 50 % Plant Watershed Area and 3,876 cy to OGS-S crest roads, as of 8/13/08. .
- Equipment: 2 dump trucks, 1 water truck, 4 D-6 dozers, 1 D-5 dozer, 1 excavator, 1 grader, 2 compactors, 2 clubcars, 12 personnel.

**Comanco**

- Received 27 rolls of Fabrinet geocomposite for OGS crest roads.
- Continued deployment of 80-mil textured liner on the OGS-S crest road, including drainage composite and sand-cement bags, and started deployment on the NGS-S crest road. Comanco reported 68,400 sq ft (3,420 lf \* 20' wide) of 80-mil liner deployed on crest roads as of 8/13/08.
- Cleared vegetation at down-comers in the OGS-S to lay out Triplanar geocomposite..
- Equipment: 1 Loader, 1 QC trailer, 1 fork-lift, 1 mini excavator, 2 ATV transports, 4 pick-up trucks, 23 personnel.

|                                                                                                                               |                              |                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|
| <b>ARDAMAN &amp; ASSOCIATES, INC.</b><br><b>PROGRESS MEETING REPORT FOR</b><br><b>PINEY POINT GYPSUM STACK SYSTEM CLOSURE</b> | File No.: 06-110A            | Page 2 of 5                                                                               |
|                                                                                                                               | Meeting Date: <u>8/14/08</u> |                                                                                           |
|                                                                                                                               | Report No: <u>175</u>        | Report Date: <u>8/20/08</u>                                                               |
| <b>CLOSURE CONSTRUCTION - SCP &amp; BASIN 2, FIRST 50% AND STACK CREST ROADS</b>                                              |                              | Project Address: 13300 U.S. Highway 41 North<br>Palmetto, Florida 34221<br>Manatee County |

#### **Inquip**

- Inquip was not represented at the meeting. CDM/Ardaman reported as follows:
- Started mobilization on 8/11/08 for the slurry cut-off wall installation; received 52 ½ two-ton bags of “new” bentonite.

#### **CDM**

- Completed re-grading NGS-N south crest road in preparation for liner installation, continued gypsum cut and rough grading the NGS-N north and west crest roads.
- Installed silt fence and started preparation work for the slurry cut-off wall installation; submitted application to Manatee County to cut trees in the Buckeye Road County ROW.

### **4.0 PROJECTED WORK FOR NEXT WEEK**

#### **Compass**

- Continue grading soil cover on liner in the SCP Basin II (including east slope) and north ditch area.
- Continue hauling borrow material and grading and compacting First 50 % Plant Watershed Area; strip grass on Second 50% Plant Watershed Area.
- Continue soil cover on liner on OGS and NGS crest roads.
- Seed SCP Basin II bottom and north ditch, and sod Basin II west slope and crest road.

#### **Comanco**

- Continue installation of 80-mil textured liner on NGS-S crest road.
- Start installation of geocomposite in OGS-S Reservoir bottom.

#### **Inquip**

- Continue preparation for slurry cut-off wall installation; plan is to start excavation at the east end on Monday 8/18/08.

#### **CDM**

- Continue concrete aprons at seepage drain clean-outs, and rip-rap pads, pending soil cover work by Compass.
- Continue grading NGS-N north and west crest roads in preparation for liner installation.
- Continue work in preparation for slurry cut-off wall installation.

### **5.0 SURVEY NOTES**

- CDM/Compass/Edgemon continued as-built surveys for various SCP Phase II and Slope Closure Phase I and II installations, as needed.
- Ardaman requested that CDM provide a few crest survey shots on liner along the edge of the OGS-N north crest road.. The area was surveyed on 8/8/08 and elevations were provided by CDM to Ardaman by email on 8/11/08.

### **6.0 PROJECT SCHEDULE**

- No workdays were lost to weather since last report.
- The project schedule was last updated by CDM and distributed by email on 8/1/08. Following is the current status of some short-term key activities:
  - 8/18/08 - start installation of soil/bentonite cutoff wall by Inquip.
- Weekend schedule: Compass will work on Saturday in the First 50 % Plant Watershed Area and crest roads.

|                                                                                                                               |                              |                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|
| <b>ARDAMAN &amp; ASSOCIATES, INC.</b><br><b>PROGRESS MEETING REPORT FOR</b><br><b>PINEY POINT GYPSUM STACK SYSTEM CLOSURE</b> | File No.: 06-110A            | Page 3 of 5                                                                               |
|                                                                                                                               | Meeting Date: <u>8/14/08</u> |                                                                                           |
|                                                                                                                               | Report No: <u>175</u>        | Report Date: <u>8/20/08</u>                                                               |
| <b>CLOSURE CONSTRUCTION - SCP &amp; BASIN 2, FIRST 50%<br/>AND STACK CREST ROADS</b>                                          |                              | Project Address: 13300 U.S. Highway 41 North<br>Palmetto, Florida 34221<br>Manatee County |

## 7.0 SHOP DRAWINGS and SUBMITTALS

All shop drawings and submittals should be submitted to Rob Werner (Ardaman) for approval, with transmittals only copied to John Cameron (Ardaman) and Mike Cruz (CDM).

- CDM submitted a specification by email on 7/11/08 for bentonite proposed by Inquip for the Buckeye Road slurry cut-off wall extension; a 5-pound sample was shipped directly to Ardaman.

## 8.0 TECHNICAL ITEMS/CLARIFICATIONS AND QUALITY ASSURANCE

Current Closure Construction Drawing Versions are summarized below. (See Meeting Minutes No. 122 or earlier for detailed version control background information):

- Phase II Slope Closure: Sets dated 12/22/05; except for drawing nos. C-1 (rev. 2) and D-2 (rev. 1) dated 12/13/06.
- SCP-S, SCP-N & Basin 2 Closure: Sets dated 11/8/08. Note that supplemental drawings were distributed at the 3/29/07 meeting to clarify installation of the SCP-S seepage collection drain system between point nos. 14 and 23 (end of drain). It was noted at the 4/5/07 meeting, the east end of the drain and limits of the lined stormwater ditch will be shortened to accommodate installation of a cut-off wall associated with the proposed Buckeye Road groundwater collection drain. See 8.0 Technical Items - Miscellaneous for more.
- First 50 percent - Plant Watershed Areas: Drawings C-1, C-2, D-1, D-2 and D-3 were distributed at the 4/5/07 meeting. Drawing C-1, revision 1 and a CD were distributed in May 2007. Updated signed and sealed Drawings (that indicate work already completed in conjunction with change order #20 were issued at the 5/8/08 construction meeting; electronic CD copies were also provided.

Ardaman issued revised "For Construction" drawings for the south drain and lined ditch segment east of Outfall 003 (to enable completion of the SCP south seepage drain and lined ditch segment east of Outfall 003 in advance and independently of construction associated with a Buckeye Road Groundwater Collection System). SCP Closure drawings C-1 (Rev. 5 dated 2/8/08), C-1A (Rev. 0 dated 2/8/08) and D-7 (Rev. 2 dated 2/11/08) were provided in pdf format via email of 2/12/08. Electronic CAD files were posted on Ardaman's ftp web site on 2/14/08.

Regarding specifications, pertinent Phase III - NGS-S Reservoir Closure Specifications and ITN specification documents shall be used. Pertinent ITN specifications, along with specifications for HDPE panel drains and concrete erosion control mats, were compiled in a specification document (Sections 24, 25, 26, 27, 28, 29 and 30, all revision 0, dated 7/6/05) on 7/7/05. Additional supplemental specifications for "Woven Geotextile" and "General Earthwork Using Soil" (Sections 31 and 32, both revision 1, dated 1/4/06) were distributed at the meeting on 1/5/06.

- Ardaman issued preliminary drawing sets, dated 8/8/07, rev. P1 - For Review, for the Buckeye Road Groundwater Collection System at the meeting. These drawings include the revised design for the south drain and lined ditch segments east of Outfall 003 (for compatibility with the proposed collection drain and cutoff wall).
- Regarding closure of the NGS-N crest roads, Ardaman replied to CDM's proposed location for placement of gypsum to be excavated to lower the crest roads to grade in a 6/6/07 email. A marked-up copy of the proposed typical cross section for placement of gypsum on the north end of the NGS-S east slope was provided at the meeting. See 8.0 Technical Items, Miscellaneous for more.

## Quality Control Activities

Note: In-place density test results will be updated next report.

- Ardaman had 6 technicians on site this reporting period.
- In-place soil cover density tests
  - SCP Phase II - 204 passing, 9 failing, none pending.
- In-place soil subgrade density tests
  - First 50% Watershed - 75 passing, 1 failing, none pending

|                                                                                                                               |                              |                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|
| <b>ARDAMAN &amp; ASSOCIATES, INC.</b><br><b>PROGRESS MEETING REPORT FOR</b><br><b>PINEY POINT GYPSUM STACK SYSTEM CLOSURE</b> | File No.: 06-110A            | Page 4 of 5                                                                               |
|                                                                                                                               | Meeting Date: <u>8/14/08</u> |                                                                                           |
|                                                                                                                               | Report No: <u>175</u>        | Report Date: <u>8/20/08</u>                                                               |
| <b>CLOSURE CONSTRUCTION - SCP &amp; BASIN 2, FIRST 50%<br/>AND STACK CREST ROADS</b>                                          |                              | Project Address: 13300 U.S. Highway 41 North<br>Palmetto, Florida 34221<br>Manatee County |

- Liner conformance testing  
Crest roads, 80-mil textured - it was verbally reported at the meeting that all 59 rolls are conditionally released for deployment.
- Liner DT's  
Crest Roads - no change - 9 marked, 9 passing, 0 failing, 0 pending

#### Miscellaneous

- Rainfall was reported by CDM at 1.39" from 8/6/08 through 8/11/08.
- CDM and Ardaman continue to monitor the Granddaddy Boil location.
- See Minutes of Meeting 146 and prior for discussion related to removal and placement of gypsum generated in conjunction with planned closure of the NGS-N west and north crest roads.
- CDM was requested at the 7/10/08 meeting to develop with their subcontractors as needed a plan for maintenance and restoration of erosion features in the grassed amended gypsum slopes, particularly the NGS north slope, where mowing has become problematic. It was noted that the effectiveness of erosion repairs in the sodded soil cover in the north stormwater ditch may be affected by the timing and effectiveness of this up-gradient maintenance work
- It was noted at the 7/5/07 meeting that the 24" NGS-N outlet pipe along the NGS-N west road was gouged at several locations; CDM will be advised whether or not repairs are necessary.
- Regarding liner installation for closure of the NGS-N south crest road, acceptable methods for lining around the existing (and in-service) spray system tie-down bollards was discussed at the 8/23/07 meeting. Additionally, a plan will need to be formulated regarding logistics for handling the SE-1 spray evaporation system header.
- It was noted at the 2/27/08 meeting that significant erosion of soil cover materials from beneath the sod on the inboard slope of the Phase II NGS-N north stormwater has occurred, most severely in the portion of the ditch west of station 109+00. Large erosion gullies and voids were found to exist beneath the sod and substantial soil sediment deposits were observed in the invert of the stormwater collection ditch. CDM/Compass were requested to evaluate the situation and develop a course of corrective action. CDM/Compass indicated at the 5/8/08 meeting that erosion repairs and restoration of the sodded area is tentatively planned to start after completion of soil cover in the SCP. A detailed repair plan is being developed by CDM/Compass.
- CDM requested pump and motor specifications at the 3/6/08 meeting, for pumps to be installed in the 48-inch manhole sumps located at both ends of SCP seepage collection system.
- CDM is monitoring the water level in Basin 1 (the outlet from which has been temporarily blocked) and can operate a portable pump as needed to convey water to the process system.
- It was noted at the 5/8/08 meeting that geocomposite is exposed at the top of the northwest ramp, indicating complete loss of soil cover on the geocomposite and perhaps on the liner as well. Ardaman will inspect the geocomposite and liner for damage. The minimum soil cover thickness needs to be restored at this area as soon as possible.
- The proposed gate valve protection scheme and final grading/dressing plans for the NGS-N outlet pipe valves located at the northwest corner of the NGS-N were discussed at the 5/8/08 meeting. On-site available concrete pipe sections and gravel materials will be used to create valve protection sleeves. Gypsum materials on the slope immediately up-gradient of the valves will be used to grade/dress the area to promote runoff away from the valves. Ardaman will provide installation and grading details. CDM agreed that this will be undertaken as part of stack maintenance.
- The south access ramp will be regraded as part of stack maintenance to reduce erosion and improve runoff control. The toe of the ramp will be pulled back towards the stack and the ramp will be crowned. Ardaman will provide details.
- Regarding location of the newly installed waterline along Buckeye Road, CDM indicated that an as-built was sent to Ardaman last week, and that Kukhauser (sp?) will field verify its location. CDM has contacted URS and Kukhauser of an apparent leak in the line.

#### Acceptances

- On 7/29/08, gypsum subgrade for liner installation, OGS-S crest road from station 46+00 to liner end at nw corner.
- On 7/29/08, gypsum subgrade for liner installation, OGS-S crest road from station 45+00 to station 31+00.
- On 8/6/08, gypsum subgrade for liner installation, OGS-S crest road from station 31+00 to liner end at se corner.
- On 8/6/08, gypsum subgrade for liner installation, NGS-S crest road from station 69+16 to station 36+00.

|                                                                                                                               |                              |                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|
| <b>ARDAMAN &amp; ASSOCIATES, INC.</b><br><b>PROGRESS MEETING REPORT FOR</b><br><b>PINEY POINT GYPSUM STACK SYSTEM CLOSURE</b> | File No.: 06-110A            | Page 5 of 5                                                                               |
|                                                                                                                               | Meeting Date: <u>8/14/08</u> |                                                                                           |
|                                                                                                                               | Report No: <u>175</u>        | Report Date: <u>8/20/08</u>                                                               |
| <b>CLOSURE CONSTRUCTION - SCP &amp; BASIN 2, FIRST 50%<br/>AND STACK CREST ROADS</b>                                          |                              | Project Address: 13300 U.S. Highway 41 North<br>Palmetto, Florida 34221<br>Manatee County |

#### 9.0 COMMENTS by PROGRAM MANAGER

- Meetings were held with FPL and PRECO on 7/24/08 to discuss power line and/or power pole issues in the First 50% Watershed and at Buckeye Road. CDM has requests in progress for cost estimates and scheduling information.
- Installed a staff gauge in the ditch west of the DAP building.

#### 10.0 COMMENTS by FDEP

- FDEP approved and distributed by email Dispute Resolution Agreement - Part 2 on 8/8/08.

#### 11.0 COMMENTS by HRK

- Regarding OGS reservoir modifications, HRK specified elevation 82.0' for the pipe invert elevations. HRK requested a sketch from Ardaman.
- HRK and CDM have assessed and are cooperating to address plant area drainage issues related to apparent conveyance problems with the ditch that flows from the southwest area of the plant to Basin 1.