

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE		File No.: 06-110A	Page 1 of 5
		Meeting Date: <u>8/21/08</u>	
		Report No: <u>176</u>	Report Date: <u>8/29/08</u>
Project Name:	CLOSURE CONSTRUCTION -SCP & BASIN 2, FIRST 50% AND STACK CREST ROADS	Project Address: 13300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County	
ATTENDEES: Ardaman: Rob Werner (telecom), John Cameron, Tony Deatherage FDEP: CDM: Mike Cruz, Jean Wilson, George Curry Comanco: Paul Moore Compass: Tim Morrow, Jeremy Giles 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 FRIDAY, August 29, 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

- A Comanco employee strained his back on 8/15/08 while lifting 80# concrete bags. A copy of Comanco's report was distributed by CDM by email on 8/20/08.

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 and placing borrow material from Larkin to the First 50 % Plant Watershed Area.
- Completed hauling and placing borrow material on liner on the OGS-S south crest road, and started on the NGS-S south and east crest roads; an updated yardage report was not available for hauled material.
- 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

- Completed deployment of 80-mil textured liner on the OGS-S crest road, including drainage composite and sand-cement bags, and continued deployment on the NGS-S crest road. Comanco reported 88,400 sq ft (4,420 lf * 20' wide) of 80-mil liner deployed on crest roads as of 8/20/08.
- Started Triplanar geocomposite installation in OGS-S bottom.
- Equipment: 1 Loader, 1 QC trailer, 1 fork-lift, 1 mini excavator, 2 ATV transports, 4 pick-up trucks, 27 personnel.

Inquip

- Inquip was not represented at the meeting. Continued preparation for installation of slurry cut-off wall.

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE	File No.: 06-110A	Page 2 of 5
	Meeting Date: <u>8/21/08</u>	
	Report No: <u>176</u>	Report Date: <u>8/29/08</u>
CLOSURE CONSTRUCTION - SCP & BASIN 2, FIRST 50% AND STACK CREST ROADS		Project Address: 13300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County

CDM

- Continued fine grading NGS-N north crest road, and rough grading the NGS-N west crest road.
- Continued preparation work for the slurry cut-off wall installation, including tree trimming and bench building.
- Manatee County has indicated that a permit is not required to do work planned by CDM in the Buckeye Road ROW.
- Equipment: 1 excavator, 1 dump truck, 1 D6 dozer, 1 loader, 6 personnel

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; start stripping vegetation on west half.
- Continue soil cover on liner on 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 gypsum stack crest roads.
- Continue installation of geocomposite in OGS-S Reservoir bottom.

Inquip

- Continue preparation for slurry cut-off wall installation; Denis Collins reported after the meeting that they would start excavation on 9/2/08.

CDM

- Continue grading NGS-N 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.

6.0 PROJECT SCHEDULE

- 2 workdays were lost to weather since last report.
- The project schedule was updated by CDM and distributed by email on 8/20/08. Following is the current status of some short-term key activities:
 - 9/2/08 - 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.

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).

- Bentonite proposed by Inquip for the Buckeye Road slurry cut-off wall extension was approved at the meeting.

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE	File No.: 06-110A	Page 3 of 5
	Meeting Date: <u>8/21/08</u>	
	Report No: <u>176</u>	Report Date: <u>8/29/08</u>
CLOSURE CONSTRUCTION - SCP & BASIN 2, FIRST 50% AND STACK CREST ROADS		Project Address: 13300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County

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 - 206 passing, 7 failing, none pending.
- In-place soil subgrade density tests
 - First 50% Watershed -77 passing, 1 failing, none pending
- Liner conformance testing
 - Crest roads, 80-mil textured - no change - it was reported at the 8/14/08 meeting that all 59 rolls are conditionally released for deployment.
- Liner DT's
 - Crest Roads - 12 marked, 12 passing, 0 failing, 0 pending

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE	File No.: 06-110A	Page 4 of 5
	Meeting Date: <u>8/21/08</u>	
	Report No: <u>176</u>	Report Date: <u>8/29/08</u>
CLOSURE CONSTRUCTION - SCP & BASIN 2, FIRST 50% AND STACK CREST ROADS		Project Address: 13300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County

Miscellaneous

- Rainfall was reported by CDM at 1.10" from 8/12/08 through 8/19/08.
- 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.

Acceptances

- None since last report.

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 reported that agreement has been reached with FPL to provide temporary support for the power line at Buckeye Road; discussions are still in progress with PRECO.
- Regarding location of the newly installed waterline along Buckeye Road, CDM indicated that Kuxhausen has withdrawn its offer to field verify its location.

10.0 COMMENTS by FDEP

- FDEP was not present at the meeting.

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE	File No.: 06-110A	Page 5 of 5
	Meeting Date: <u>8/21/08</u>	
	Report No: <u>176</u>	Report Date: <u>8/29/08</u>
CLOSURE CONSTRUCTION - SCP & BASIN 2, FIRST 50% AND STACK CREST ROADS	Project Address: 13300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County	

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 at the 8/14/08 meeting.
- Burial of contaminated material from the sulphuric plant has been completed in the NCP.