

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE		File No.: 06-110A	Page 1 of 5
		Meeting Date: <u>6/7/07</u>	
		Report No: <u>116</u>	Report Date: <u>6/12/07</u>
Project Name:	CLOSURE CONSTRUCTION - OGS & NGS SLOPES, NGS-N RELIEF DITCH, SCP-S AND SCP-N		Project Address: 300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County
ATTENDEES: Ardaman: Nadim Fuleihan, Rob Werner, John Cameron, Tony Deatherage FDEP: John Coates CDM: Dean Carter, Mike Cruz, Jack Partin, Jean Wilson, George Curry Comanco: Paul Moore Compass: Mike Slovensky, Dan Hemphill HRK: Art Roth, Ivan Nance			

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

Next Meeting is Scheduled for Thursday, June 14, 2007
Construction/Engineering Meeting at 9:00 am

1.0 REVIEW MINUTES OF PREVIOUS MEETING

- No corrections were noted.

2.0 SAFETY

- No safety incidents were reported.

3.0 SUMMARY OF WORK PERFORMED

Compass:

- Well Water usage - 55,000 gallons since last report.
- Water seed and sod areas; completed grassing the NCP berm road and slopes.
- Re-sodded the NGS-N washout on the west slope; started repairs on the NGS-N north slope.
- Continued hauling soil from the Gulfstream II borrow area; total hauled as of 6/6/07 was reported at 65,692 cy (estimated by truck count).
- Continued placing and compacting soil cover on liner in the Phase I south stormwater ditch liner.
- Started placing soil cover on liner in the Phase II stormwater pond.
- Continued working on access ramps across the NGS-S east stormwater ditch.
- Equipment: 6 dump trucks, 1 water truck, 3 D6 dozers, 2 excavators, 1 motor grader, 2 club carts, 1 bobcat, 3 pumps - 19 personnel.

Comanco

- A written report was not submitted.
- Completed mobilization for the SCP liner installation.
- Started liner deployment on the SCP-S west compartment east dike and bottom; 214,998 sq ft of 40-mil textured and smooth liner was deployed as of 6/6/07.
- Installed panel drain at inlet structure #9 in the Phase I west stormwater ditch.
- Equipment: 1 excavator, 1 loader, 1 crawler, 2 pick-up trucks, 1 QC trailer - 18 personnel

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CDM

- Continued grading and compacting the SCP-S west compartment; installed temporary drain pipes at the SW and SE corner locations of Structure Nos. 2 and 3.
- Continued dewatering and grading the SCP-N.
- Continued desiccating sludge in the SCP-N, and loading and hauling sludge to the NCP.
- Started prefabricating drain collector-to-header pipe connections for the SCP seepage collection drain system.
- Worked on connection between the OGS-S seepage drain outlet pipe and SCP manhole No. 1.
- Equipment: 4 dump trucks, 1 loader, 4 D6 dozers, 4 excavators including 1 long-stick, 3 compactors, 2 water trucks, 1 4-inch double diaphragm pump, 3 6-inch service pumps, 1 2-inch pump, 2 plate compactors, 1 12-inch fusing machine - 15 personnel.

4.0 PROJECTED WORK FOR NEXT WEEK

Compass:

- Water and repair seeded and sodded areas.
- Continue hauling soil from the Gulfstream II borrow area and placing soil cover on the Phase I stormwater ditch liner and the Phase II stormwater pond.
- Continue working on access ramps across the NGS-S east stormwater ditch and start placing soil cover on liner in the Relief Ditch.

Comanco:

- Continue liner deployment on the SCP-S west compartment dikes and bottom; start detail work.

CDM

- Continue grading and compacting the SCP-S west compartment (including structure Nos. 2 and 3).
- Continued grading the SCP-N, continue desiccating sludge in the SCP-N, and continue loading and hauling sludge from the SCP-N to the NCP and as needed to top off the SCP sludge storage area.
- Continue preparation of excess material stockpile area.
- Start excavating for the SCP-S south seepage drain installation; continue prefabricating drain collector-to-header pipe connections.

5.0 SURVEY NOTES

- CDM/Edgemon continued as-built surveys of the SCP-S liner subgrade and submitted to Ardaman for approval.
- CDM/Edgemon surveyed the elevations of the extended top-of-casing on PZ-201A and PZ-203, and provided data by email to Ardaman on 6/6/07.

6.0 PROJECT SCHEDULE

- ½ workday was lost by CDM and Compass to rain this reporting period.
- CDM updated and distributed the project schedule by email on 6/5/07. CDM distributed the schedule at the meeting, and indicated that activities had been updated to reflect current progress.
- Weekend work schedule: CDM and Compass on Saturday, Compass possibly on Sunday.

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 Steve Solters (CDM).

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- AgruAmerica provided additional factory certifications directly to Ardaman for SCP liner rolls.

8.0 TECHNICAL ITEMS/CLARIFICATIONS AND QUALITY ASSURANCE

Updated drawing sets, dated 9/28/05, were distributed at the 9/29/05 meeting for the NGS-S Cap and NGS-N Relief Ditch and the Phase I Slope Closure. Revised Phase I Slope Closure drawing Nos. C-2, C-5, C-6, D-6, D-9, D-10, D-11), dated 2/15/06 (various revision nos.) were distributed at the 2/16/06 construction meeting to reflect changes related to lowering the OGS south stormwater ditch seepage collection drain. Electronic (ACAD) are available for download from Ardaman's ftp web site. Current drawings, dated 12/16/05, were distributed at the 12/16/05 meeting for Slope Cover Construction - OGS Ponds. Current drawings (including all detail drawings for structures, drains, etc.), dated 12/22/05 (various revision nos.), for the Phase II Slope Closure were delivered to CDM at the site on 12/23/05. Current drawings (including all detail drawings for structures, drains, etc.), dated 1/11/06 (various revision nos.), for the SCP-South Compartment Closure were distributed on 1/12/06, along with CD's containing ACAD files for all current for the SCP-South and Phase II slope Closure drawings. Revised SCP-South Compartment Closure Drawing No. D-6, dated 2/15/06 (Rev. 1), was distributed at the 2/16/06 construction meeting to reflect changes related to the lowered the OGS south seepage collection drain - an electronic version (ACAD) was emailed to CDM and Moretrench on 2/28/06. Regarding finish grades for the SCP-S Process Water Sump, a drawing was provided by Ardaman at the 7/6/06 construction meeting (and attached to meeting minutes) indicating optional design grades for the pond bottom area, which were adopted by CDM/Compass. Drawing Nos. C-1, C-3, C-4, D-1 and L-1 will be updated for the record to indicate the revised grading plan.

Regarding specifications for the OGS Slopes, Top Cap Areas and NGS-N Relief Ditch, pertinent NGS-S Reservoir, Phase II OGS Compartment Closure and ITN specification documents shall be used. Pertinent specification sections from the Phase II and ITN sources, along with specifications for HDPE panel drains and concrete erosion control mats, were issued in a preliminary 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.

- Preliminary drawings and CD's were distributed at the 9/15/05 meeting for the NGS-S Soil Slope Cover Construction, C-1 through C-5 for Contractor's use in estimating take-off quantities.
- Drawings were distributed by Ardaman at the 7/20/06 meeting for additional panel drains required in the following areas: OGS Slope Pond, OGS-N Cap, OGS west and south ditches, and the NGS-S east ditch. Copies of these figures were attached to the electronic version of the meeting minutes.
- Final drawing sets for the SCP phase 2 closure, dated 11/8/08, including all detail and liner drawings, were issued for construction and distributed at the 11/16/06 (hard copies and CD's). Additional signed large drawings sets were distributed at the meeting. 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 that the east end of the drain may be shortened to accommodate installation of a cut-off wall that is being considered in conjunction with design discussions related to the proposed Buckeye Road groundwater collection drain.
- Ardaman provided hard copies and a CD for Phase II Slope Closure drawing revisions on 12/14/06 as follows: C-1, revision 2, and D-2, revision 1, both dated 12/13/06.
- Drawings C-1, C-2, D-1, D-2 and D-3 were distributed at the 4/5/07 meeting for the First 50 percent - Plant Watershed Areas. Drawing C-1, revision 1 and a CD were distributed at the meeting for use as an interim grading plan.
- Ardaman distributed a detailed grading plan figure at the 5/10/07 meeting to clarify the transition from typical berm section to outlet pipe profile at the locations of the SCP cap outlets; additional clarifications were sent by email to CDM on 5/21/03 and 5/23/07.
- 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 a sketch at the meeting.

Quality Control Activities

- Ardaman had 7 technicians on site this reporting period.

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- In-place gypsum/soil density tests
Phase II SCP closure - 92 passing, 3 failing (SCP-N pond bottom), none pending.
- In-place soil fill density tests
OGS reservoir slope cover - no change - 59 passing, none failing, none pending.
Phase I stormwater ditches soil cover - 42 passing, none failing, none pending.
- Liner conformance testing
SCP Phase II liner conformance testing was updated on 6/6/07 (revision 2) and was distributed at the meeting; 76 rolls of 40-mil smooth, 28 rolls of 40-mil textured and 15 rolls of 80-mil textured have been conditionally approved.
NOTE: this update represents rolls tested and conditionally approved as of 5/31/07.
- Liner destructive testing (DT's)
SCP Phase II pond - 16 marked, none taken as yet.
- In a 6/6/07 email to DEP and FDEP, Ardaman indicated a potential issue related to blemishes on the 40-mil smooth HDPE liner that were discovered during installation of the first two rolls in the SCP. The blemishes were found to consistently occur in each deployed roll at a 9-foot spacing along a line offset about 6.5 feet from the edge of the roll. (According to Agru-America, the liner manufacturer, these blemishes become incorporated in the liner during the extrusion process due to a minor imperfection in the surface of the roller extrusion die; blemish samples taken from rolls delivered to the site and those observed on deployed rolls consist of very small protrusions or "bumps" with no adjacent inclusions and no evidence of any blemish on the underside of the sheet.) Based on observations by the Engineer during the site tour, these "typical" blemishes will not require routine repair (provided no inclusions are present and no indentations are observed on the underside of the sheet). Any other sporadic blemishes will continue to be repaired in accordance with the Specifications

Miscellaneous

- Rainfall was reported by CDM at 2.16" from 5/29/07 through 6/5/07.
- CDM and Ardaman continue to monitor the Granddaddy Boil location.
- Protection of the twin 18" gate valves on the NGS-N outlet pipeline and plans for final grading of the existing low area around the valves at the northwest corner on the NGS-N were discussed at the 5/17/07 meeting. Ardaman will provide a sketch for HRK's review and then to CDM for execution.
- Regarding CDM's stated plan to begin excavations for the seepage collection drain, Ardaman indicated at 5/31/07 meeting that the design for the south drain segment east of Outfall 003 will be revised for compatibility with the proposed Buckeye Road groundwater collection drain and associated cutoff wall (plans for which are currently under review by CDM).
- At CDM's request, Ardaman provided a marked-up sketch by email on 6/6/07, with elevations indicated per section K on drawing D-1.

Acceptances

- On 6/4/07, SCP-S subgrade for liner installation, the east dike from station 59+75 to 64+75.
- On 6/5/07, SCP-S subgrade for liner installation, the west dike from station 18+80 to 12+80.
- On 6/5/07, SCP-S subgrade for liner installation, the pond bottom from contour 10.65 to 8.25.
- On 6/6/07 (verbal), SCP-S subgrade for liner installation, the east dike from station 59+75 to 58+75.

9.0 COMMENTS by PROGRAM MANAGER

- A proposal for gravel erosion protection, yet to be installed along the inboard slope of the access road at the toe of the OGS-S slope cover, was last discussed by conference call on 2/13/07 between FDEP, CDM and Ardaman. [Ardaman forwarded a sketch to CDM showing a potential cross section revision that may be considered to reduce the required gravel quantity via email on 2/23/07.] It has been agreed that the existing access ramps will be left in place until this work is done.
- Compass updated their grassing tabulations and sent by email on 5/30/07 to CDM and Ardaman. These tabulations were further reviewed by Ardaman at the meeting. See 10.0 Comments by FDEP for more.

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- CDM received a preliminary cost proposal from Compass for closure of the First 50 percent - Plant Watershed Area, which was forwarded to FDEP and discussed at the 4/26/07 Program Manager's meeting. There are still unresolved pricing issues regarding the power lines, well pump, etc.
- CDM/Comanco submitted preliminary quantity estimates for crest road closure. (Ardaman quantity estimates were submitted to FDEP via email 5/30/07). CDM is waiting on Compass quantity estimates.

10.0 COMMENTS by FDEP

- FDEP requested that the grassing tabulation discrepancies between Compass/CDM and Ardaman be resolved as soon as possible. (A copy of latest Compass estimates and a final proposed schedule of values prepared by Ardaman were forwarded to Compass via email after the meeting; Compass indicated agreement with the proposed schedule of values in an email later the same day.)
- FDEP requested that CDM review and modify as needed current protocols for managing and controlling use of treated process water for dust control and compaction moisture conditioning in the SCP to ensure that only clean water is used for all other areas of the site.

11.0 COMMENTS by HRK

- No comments.