TO:

**BOARD OF DIRECTORS** 

FROM:

MICHAEL S. LEBRUN W

**GENERAL MANAGER** 

DATE:

MAY 23, 2014

# AGENDA ITEM C MAY 28, 2014

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#### PRESENTATIONS AND REPORTS

The following presentations and reports are scheduled:

- C-1) DIRECTOR OF ENGINEERING AND OPERATIONS Report on recent activities
- C-2) REPORT ON MAY 14, 2014 REGULAR MEETING CLOSED SESSION Announcement of actions, if any, taken in Closed Session
- C-3) DIRECTORS' ANNOUNCEMENTS OF DISTRICT & COMMUNITY INTEREST AND REPORTS ON ATTENDANCE AT PUBLIC MEETINGS, TRAINING PROGRAMS, CONFERENCES, AND SEMINARS.

  Receive Announcements and Reports from Directors
- C-4) RECEIVE PUBLIC COMMENT ON PRESENTATIONS AND REPORTS PRESENTED UNDER ITEM C AND BY MOTION RECEIVE AND FILE PRESENTATIONS AND REPORTS

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TO:

BOARD OF DIRECTORS

FROM:

MICHAEL S. LEBRUN WA

**GENERAL MANAGER** 

DATE:

MAY 23, 2014

**AGENDA ITEM** C-1 MAY 28, 2014

#### DISTRICT DIRECTOR OF ENGINEERING AND OPERATIONS **SUMMARY OF ACTIVITIES**

#### **ITEM**

Report on recent engineering and operations activities [NO ACTION REQUESTED].

#### **BACKGROUND**

Director of Engineering and Operations, Peter Sevcik's written update on District capital projects and operations.

#### **RECOMMENDATION**

Staff recommends that your Honorable Board receive the update.

#### **ATTACHMENTS**

A. Engineering and Operations Update

MAY 28, 2014

ITEM C-1

ATTACHMENT A



#### NIPOMO COMMUNITY SERVICES DISTRICT

148 SOUTH WILSON STREET POST OFFICE BOX 326 NIPOMO, CA 93444 - 0326 (805) 929-1133 FAX (805) 929-1932 Web site address www.ncsd.ca.gov

#### **MEMORANDUM**

TO:

MICHAEL S. LEBRUN, P.E., GENERAL MANAGER

FROM:

PETER V. SEVCIK, P.E., DIRECTOR OF ENGINEERING & OPERATIONS

DATE:

MAY 22, 2014

RE:

**ENGINEERING AND OPERATIONS UPDATE FOR APRIL 2014** 

#### **COMPLETED PROJECTS**

- Blacklake Well #4 Pump Replacement Project
  - SCOPE OF WORK Replacement of existing well pump, motor, column pipe and discharge piping assembly, downhole well video survey, installation of a new pump control valve, pressure relief and surge anticipating valve, gate valves, check valve, flow meter, air release valve, sounding tube, chlorination tube, transducer tube, service saddles, blowoff piping, and electrical system upgrade.
  - FINAL CONSTRUCTION CONTRACT COST \$211,982

#### **Completed Well**



#### **PROJECTS IN CONSTRUCTION**

#### • Southland WWTF Phase 1 Improvement Project

- o STATUS
  - Scheduled Contract Completion July 5, 2014
  - Time Elapsed to Date 90% (634 of 705 days)
  - Work Completed to Date 97% (Based on approved pay requests)
  - New plant on-line as of March 5, 2014
  - Gravity belt thickener commissioned week of April 21, 2014
  - Correction of punch list items in progress

Construction Contract Cost Summary			
Original Contract Amount – Cushman Construction Co.	\$10,224,900		
Change Order for Alternate Y, Additional Disposal Ponds	\$867,900		
Other Change Orders to Date	\$340,134		
Revised Contract Amount	\$11,432,934		
Completed to Date	\$11,123,445		

#### **Aerial View**



**Gravity Belt Thickener in Operation** 



#### • Supplemental Water Project Phase 1 Bid Package 4 – Joshua Road Pump Station

 SCOPE OF WORK – 1930 lineal feet of 24-inch diameter waterline, 400 gpm pump station with back-up power, controls, and instrumentation systems, a pressure reducing station and chloramination systems at 4 existing District wells.

#### o STATUS

- Scheduled Contract Completion May 22, 2015
- Time Elapsed to Date 24% (127 of 519 days)
- Work Completed to Date 2% (Based on approved pay requests)

SWP Bid Package 4 Construction Contract Cost Summary				
Contract Amount – Spiess Construction Co. Inc. \$4,364,03				
Change Orders	\$529,670			
Revised Contract Amount	\$4,893,700			
Completed to Date	\$91,375			

**Pump Can Installation - Top** 



**Pump Can Installation - Bottom** 



#### • Standpipe Tank Rehabilitation and Inlet Modification Project

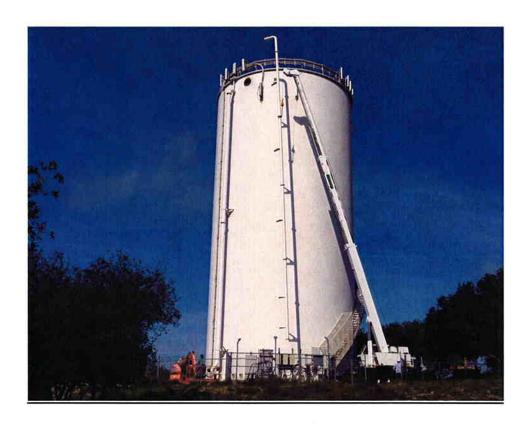
 SCOPE OF WORK - Piping for new inlet and new inlet connection, modification of existing tank inlet/outlet piping, removal and replacement of existing drain/overflow valves, new cathodic protection system, and interior tank coating.

#### o STATUS

- Scheduled completion July 27, 2014
- Construction in progress

Construction Contract Cost Summary				
Contract Amount – Crosno Construction, Inc. \$263,35				
Change Orders	\$16,523			
Revised Contract Amount	\$279,873			
Completed to Date	\$75,953			

#### **New Inlet Installation**



#### **OPERATIONS**

#### Wells and Water Distribution System – April 2014

YEAR	TOTAL MONTHLY PRODUCTION	AVERAGE DAILY PRODUCTION		
2014	168.3 Acre Feet	5.6 Acre Feet Per Day		
2013	224.0 Acre Feet	7.5 Acre Feet Per Day		
5 Year Average	199.0 Acre Feet	6.6 Acre Feet Per Day		

- o Daily maintenance and operation of 8 wells
- o 20 distribution system routine coliform monitoring samples
- o 30 distribution system disinfectant residual monitoring samples
- o Eureka Well out of service for repairs

#### Southland Wastewater Treatment Facility and Collection System – April 2014

TOTAL EFFLUENT	AVERAGE DAILY BOD <sub>5</sub>		<u>TSS</u>
TREATED	FLOW TREATED		
17.5 Million Gallons	.584 Million Gallons	4 mg/l Monthly	7 mg/l Monthly
	Per Day	Average	Average
53.7 Acre Feet	1.8 Acre Feet Per Day	6 mg/l Daily	12 mg/l Daily
		Maximum	Maximum

- o Daily maintenance and operation of .9 MGD treatment plant and 10 lift stations
- No sewer system overflows
- Effluent biochemical oxygen demand (BOD) requirement for monthly average of 60mg/L met and daily maximum of 100 mg/L requirement met
- Effluent total suspended solids (TSS) requirement for monthly average of 60mg/L met and daily maximum of 100 mg/L requirement met
- o 9 Each Influent BOD, TSS samples
- o 9 Each Effluent BOD, TSS samples
- o 31 Effluent Settleable Solids samples
- 31 Each Effluent pH, dissolved oxygen samples

#### Blacklake Wastewater Reclamation Facility and Collection System – February 2014

TOTAL EFFLUENT TREATED	AVERAGE DAILY FLOW TREATED	BOD <sub>5</sub>	<u>TSS</u>
1.5 Million Gallons	.051 Million Gallons	30 mg/l Monthly	34 mg/l Monthly
	Per Day	Average	Average
4.7 Acre Feet	.16 Acre Feet Per Day	32 mg/l Daily	36 mg/l Daily
		Maximum	Maximum

- Daily maintenance and operation of .2 MGD treatment plant and 3 lift stations
- Effluent biochemical oxygen demand (BOD) requirement for monthly average of 40 mg/L met and daily maximum 100 mg/L requirement met
- Effluent total suspended solids (TSS) requirement for monthly average of 30 mg/L exceeded and daily maximum of 100 mg/L requirement met
- No sewer system overflows
- 5 Each Effluent BOD, TSS samples
- 22 Each Effluent total coliform, settleable solids, pH, Chlorine residual, dissolved oxygen samples

#### **Compliance Reporting**

- April Monthly Distribution System Coliform Monitoring Summary to California Department of Public Health
- Quarterly Raw Water Coliform Compliance Report to California Department of Public Health
- March Wastewater Monitoring Report for the Blacklake Wastewater Reclamation Facility to Central Coast Regional Water Quality Control Board
- March Monthly Wastewater Monitoring Report for the Southland Wastewater Treatment Facility to Central Coast Regional Water Quality Control Board
- March Monthly 'No-Spill' Certification for California Integrated Water Quality
   System (CIWQS) for both Southland and Blacklake Sewer Collection Systems

#### PROJECTS IN DESIGN AND PLANNING STAGES

- Supplemental Water Project Phase 1 Bid Package 3 Blosser Road Waterline
  - SCOPE OF WORK 5700 lineal feet of 24-inch diameter waterline including 300 lineal feet levee crossing jack and bore
  - STATUS
    - Bid document revision in progress
    - Tentative schedule
      - Authorization to Bid June 2014
      - Contract Award August 2014
      - Construction September 2014 December 2014
- Blacklake Wastewater Master Plan
  - Technical evaluation of existing wastewater plant and sewer collection system in progress
  - o Treatment plant operations and maintenance manual update in progress

#### **OTHER PROJECTS AND PROGRAMS**

- Safety Program
  - Weekly operations tailgate safety meeting for Operations staff
  - Quarterly all-hands safety meeting for all District staff
  - On-line safety training for all District employees
- Development Review
  - Water Will Serve Issued 0

#### **ATTACHMENTS**

- A. April 2014 Southland WWTF Improvements Phase 1 Project Monthly Construction Progress Report
- B. Water Production Summary

# **Nipomo Community Services District**



# Southland WWTF Improvements Phase 1 Project



Prepared By: MNS Engineers, Inc.

**April** 2014

# **Schedule and Budget Summary**

# **Schedule Summary**

Notice to Proceed	July 30, 2012		
Original Contract Days Contract Days Added Revised Contract Days Elapsed Time (Days) Remaining Time (Days) Contract Completion Date	645 60 705 (634) 71 July 5, 2014		
Time Elapsed to Date Work Completed to Date	90% 97%		
Approved Change Orders (Days)	60 days		

#### **Budget Summary**

Original Contract Amount	\$10,224,900.47
Approved Change Orders (Cost)	\$1,208,033.59
Revised Contract Amount	\$11,432,934.06
Previous Payments	\$10,384,936.06
Current Month Pay Request	\$738,508.64
Total Work Completed	\$11,123,444.70
Work Remaining	\$309,489.36

# Progress Summary General Site Work

#### **Summary of Work:**

Cushman continued with demolition of existing structures, manholes, piping, electrical components and concrete ramps. Debris was removed from site along with equipment and materials. Bergelectric has installed the majority of equipment and panel labeling and continues to address punch list items. Cushman and Bergelectric installed the remaining street lights and Valley Fencing installed new fencing in various locations around the site perimeter.

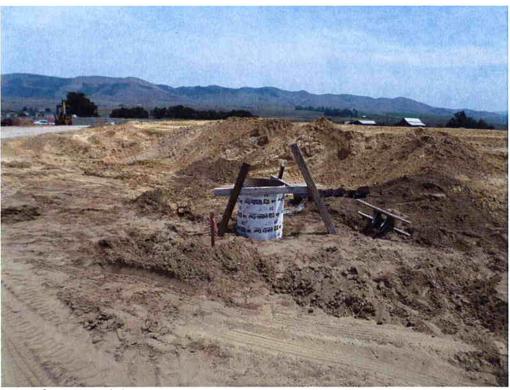
#### **Pictures:**



Cushman pouring concrete collars around valves.



Cushman using auger to bore hole for remaining street light bases.



Form for street light base.



Cushman pouring bases for remaining street lights.



Cushman grouting street light bases.



Demolition of existing blower building.



Demolition of existing blower building.



Cushman completing demolition of the existing building.



Cushman breaking up slab from existing building.



Cushman loading and hauling debris from existing building.



Valley Fence installing new fence on the north border of the site.



Fencing on the north side of the WWTF installed.



Valley Fence setting posts for the new fence along the east side of the site and Hwy 101.



New fencing being installed along the Hwy 101 border.



Cushman pouring concrete channel for new electric gate at site entrance.



J N J Doors installing aluminum rain guards over doors.

# **Process 10 Influent Pump Station**

#### **Summary of Work:**

Cushman has been performing repair of minor concrete defects and general clean-up of area and addressing punch list items.

# Process 20 & 30 Headworks Screening System & Grit Removal System

#### **Summary of Work:**

Cushman has been working with District personnel with adjustments of set points on automated equipment.

### **Process 45 Electrical/Blower Building**

#### **Summary of Work:**

Cushman and Bergelectric performed adjustments and corrections to programming and functionality of instruments not identified during testing but apparent during operation of the plant. Cushman installed stairs at generator.

#### **Pictures:**



Cushman installing aluminum stairs and deck to access new emergency generator.



Cushman installing handrail at stairs for new emergency generator.

# Process 60 - Sludge Thickening System

# **Summary of Work:**

Cushman performed testing and commissioning of the Sludge Thickening System.

#### **Pictures:**



Commissioning and testing the Sludge Thickening System.

#### **Alternate Y**

#### **Summary of Work:**

Cushman performed demolition of existing fences in Area F and along the Hwy 101 side of the site, in preparation for new fencing which was installed by Valley Fence. Mark Switzer Excavating, Cushman's earthwork subcontractor, cleared and grubbed Area F for construction of Ponds 9 & 10 with Rincon present to provide archaeological and biological inspection. After clearing and grubbing was completed, Switzer began excavation for Ponds 9 & 10 using the excavated material to build landscaping berms along the east and west sides of the site and to fill existing Ponds 2, 3 & 4, as well as construct future Aeration Basin #2. Once the berms were constructed, KCI Environmental installed irrigation systems and planted native plants. Cushman also installed the remaining portion of the 24-inch SE piping which extended to new Ponds 9 & 10.

#### **Pictures:**

#### **Fence Removal**



Cushman removing existing fence around Area F.



Cushman removing shrubs and existing chain link fence.

# **Excavating Area F for Ponds 9 & 10**



Switzer excavating Ponds 9 & 10 in Area F.



Switzer excavating Area F for Ponds 9 & 10.



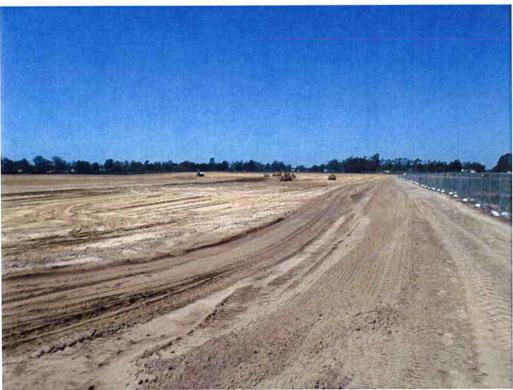
Switzer excavating material from Area F to build Ponds 9 & 10.



Switzer continuing work on Ponds 9 & 10 in Area F.



Switzer continuing to excavate material to build Ponds 9 & 10.

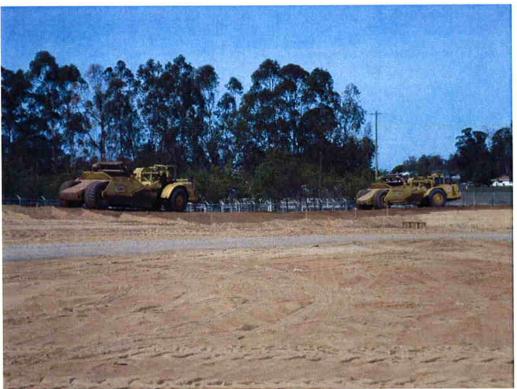


Switzer continuing to excavate in Area F to build Ponds 9 & 10.



Switzer finishing the bottom of Ponds 9 & 10 and checking grade.

#### **Landscape Berms**



Switzer scrapers using native material from Area F, construction of Ponds 9 & 10, to build up the berm on the west side of the site.



Switzer shaping berm on the west side of the side.



Switzer finish construction of berm on the east side of the site and Hwy 101.



KCI Environmental installing reclaimed water irrigation system on berm to the east of the site.



KCI Environmental laying out and installing reclaimed water irrigation lines and power to controllers.



Installing piping for landscaping.



Installing plants along east berm and Hwy 101 border.



Planting new plants on east berm.



KCI Environmental installing irrigation lines to new plants.



KCI Landscaping placing mulch around new plants on east berm.



KCI Environmental installing back flow prevention assembly.

# Filling Ponds 2 & 3



Switzer filling existing Ponds 2 & 3 with native material from construction of Ponds 9 & 10.



Switzer filling Ponds 2 & 3 with native material from Ponds 9 & 10.

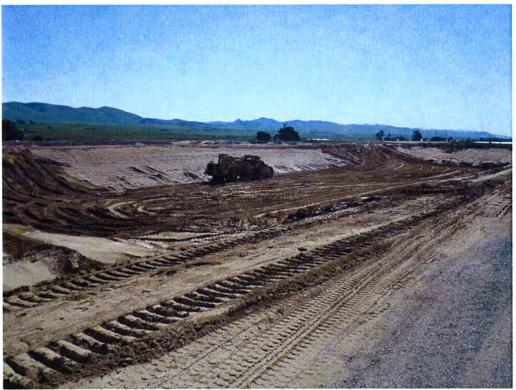


Switzer continuing to fill Ponds 2 & 3 with native material.

Filling Pond 4 and Future Aeration Basin #2



Switzer starting to cut existing banks of Pond 4 to shape it for future Aeration Basin #2.



Switzer starting to backfill existing Pond 4 and build berm in the middle to create future Aeration Basin #2.



Switzer filling Pond 4 and creating berm for future Aeration Basin #2.



Switzer continuing to fill Pond 4 and build berm for future Aeration Basin #2.



Switzer cleaning up slopes and finishing future Aeration Basin #2, which was constructed from half of existing Pond 4.

# Piping to New Ponds 9 & 10



Cushman installing 24-inch SE piping to Ponds 9 & 10.



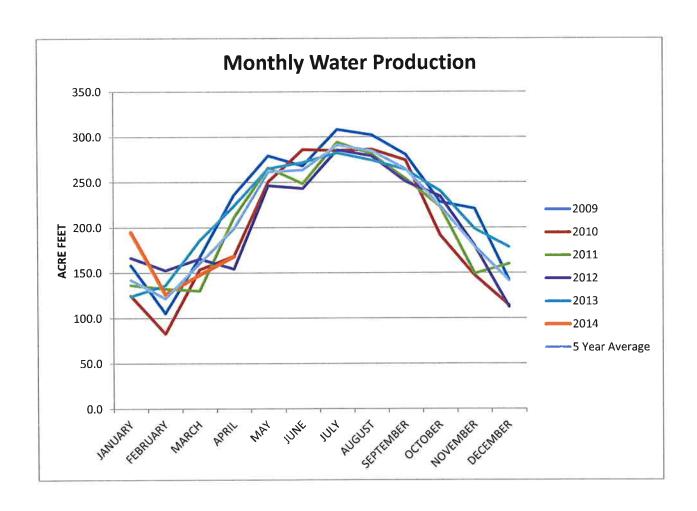
Cushman installing 24-inch SE piping to Ponds 9 & 10.



Cushman backfilling and compacting over new 24-inch SE pipe to Ponds 9 & 10.

# NIPOMO COMMUNITY SERVICES DISTRICT WATER PRODUCTION SUMMARY

	2009	2010	2011	2012	2013	2014	Five Year
	AF	AF	AF	AF	AF	AF	Average
JANUARY	158.6	124.8	136.5	166.6	124.0	194.8	142.1
FEBRUARY	105.5	82.9	132.5	152.7	136.3	126.1	122.0
MARCH	167.0	153.6	130.2	165.6	185.5	147.8	160.4
APRIL	236.3	168.8	211.4	154.5	224.0	168.3	199.0
MAY	279.4	250.8	266.2	246.4	265.4	0.0	261.6
JUNE	268.2	286.1	248.5	243.2	272.1	0.0	263.6
JULY	308.3	285.0	294.4	285.6	282.4	0.0	291.2
AUGUST	302.4	286.6	281.2	279.2	274.4	0.0	284.7
SEPTEMBER	280.6	274.5	253.7	250.8	264.0	0.0	264.7
OCTOBER	228.1	191.5	223.2	234.5	240.5	0.0	223.6
NOVEMBER	220.8	147.1	149.1	180.0	198.4	0.0	179.1
DECEMBER	142.0	114.0	159.9	112.4	178.5	0.0	141.4
TOTALS	2697	2366	2487	2472	2645	637	2533



TO:

**BOARD OF DIRECTORS** 

FROM:

MICHAEL S. LEBRUN WA

**GENERAL MANAGER** 

DATE:

MAY 23, 2014

AGENDA ITEM C-2 MAY 28, 2014

# MAY 14, 2014 REGULAR MEETING CLOSED SESSION REPORT

#### ITEM

Announcement of actions, if any, taken during Closed Session at previous Board Meeting [NO ACTION REQUESTED]

#### **BACKGROUND**

The May 14, 2014 Regular Meeting Closed Session included:

- 1. CONFERENCE WITH DISTRICT LEGAL COUNSEL RE: PENDING LITIGATION PURSUANT TO GC §54956.9
  - a) SMVWCD VS. NCSD (SANTA CLARA COUNTY CASE NO. CV 770214, SIXTH APPELLATE COURT CASE NO. H032750 AND ALL CONSOLIDATED CASES).
  - b) NCSD v Troesh et. al. SLOCSC# CV130175
  - c) Bening v NCSD SLOCSC #14CV-0069
- 2. CONFERENCE WITH LEGAL COUNSEL: LIABILITY CLAIM PURSUANT TO SECTION 54956.95:

Claimant: Specialty Construction

Agency: NCSD

3. ANNUAL PERFORMANCE REVIEW OF DISTRICT LEGAL COUNSEL PURSUANT TO GOVERNMENT CODE SECTION 54957

Staff will report on closed session action taken, if any.