

- Engineering Services Key Activities for the Month of May 2009

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 - Weymouth Water Treatment Plant Improvements Program
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Attachments

Monthly Progress Report of Construction and Procurement Contracts for April 2009.

Detailed Report

This report details key engineering activities for the month of May 2009.

Recent Events:

Engineering Managers Member Agency Forum: On May 6, 2009, staff hosted the initial Engineering Managers Member Agency Forum at Union Station (Figure 1). Over 15 member agencies attended and discussed common interests, issues, and challenges. Some of the items include managing capital programs, infrastructure reliability, managing with budget constraints, service connection requests, water resources. There was a high interest in sharing practices and discussing technical approaches to address these items in the future.



Figure 1: Engineering Managers Member Agency Forum

ARRA Funding: Metropolitan staff provided comments electronically on May 26, 2009 to the CDPH on State Revolving loan grants for construction projects under the ARRA program. Metropolitan submitted seven projects, one of which made a draft list for potential funding. Staff's written testimony focused on including additional criteria for evaluating funding needs to include rehabilitation and replacement projects for preventative maintenance.

Supply and Delivery Reliability:

Inland Feeder Program: This program consists of 44 miles of pipeline and tunnels that will enable Metropolitan to convey up to 1,000 cubic feet per second of State Water Project supplies from the Devil Canyon Second Afterbay to Diamond Valley Lake. Eight of nine construction contracts have been completed. Recent activities include the following:

- **Arrowhead East Tunnel (AET)** – In April, a significant milestone was achieved as the contractor installed the tunnel’s remaining 6,600 feet of pipe liner from the Strawberry Creek Portal. The pipe installation was completed approximately six weeks ahead of schedule. Cellular grouting (grout injected between the pipe and the outer bolted-gasketed mining segments) continued from the City Creek Portal and is approximately 85 percent complete. The final stage of grouting, termed contact grouting, will continue through June to fill any voids in the cellular grout. In June, the contractor will also begin installation of the pipe outside the tunnel at Strawberry Creek that connects the tunnel to the previously constructed pipeline running between the AET and Arrowhead West Tunnel. The contractor initiated preliminary demobilization activities at the Strawberry Creek portal.
- **Arrowhead West Tunnel (AWT)** – In April, a significant milestone was achieved as the contractor installed the tunnel’s remaining 4,200 feet of pipe liner from the Waterman Canyon Portal (Figure 2). As with AET, this work was also completed approximately six weeks ahead of schedule. Cellular grouting continued from the Devil Canyon Portal and is approximately 75 percent complete. Grouting work will continue through July as the contractor conducts contact grouting to fill voids that typically remain after cellular grouting. Construction continued on the access structure at the Waterman Canyon Portal.



Figure 2: AWT – Installation of last piece of pipe in Arrowhead West Tunnel

Supply and Delivery Reliability (cont.):

San Diego Pipeline No. 6: The North Reach of San Diego Pipeline No. 6 was completed in 2006. Alternative alignments for the remaining portions (Figure 3), which will ultimately stretch an additional 25 miles to the San Diego County Water Authority (SDCWA) Twin Oaks Valley Water Treatment Plant, have been evaluated with respect to construction and right of way constraints, environmental impacts, construction costs, operations and maintenance costs, schedule, and operational flexibility. The alignment evaluation has been conducted in conjunction with the SDCWA. A final workshop was held in January 2009 to rank the various alignments in accordance with agreed-upon scoring criteria. Additional analyses are currently underway to update the on-line date for San Diego Pipeline No. 6. The results of these analyses will be presented to Metropolitan’s Board at its August meeting.

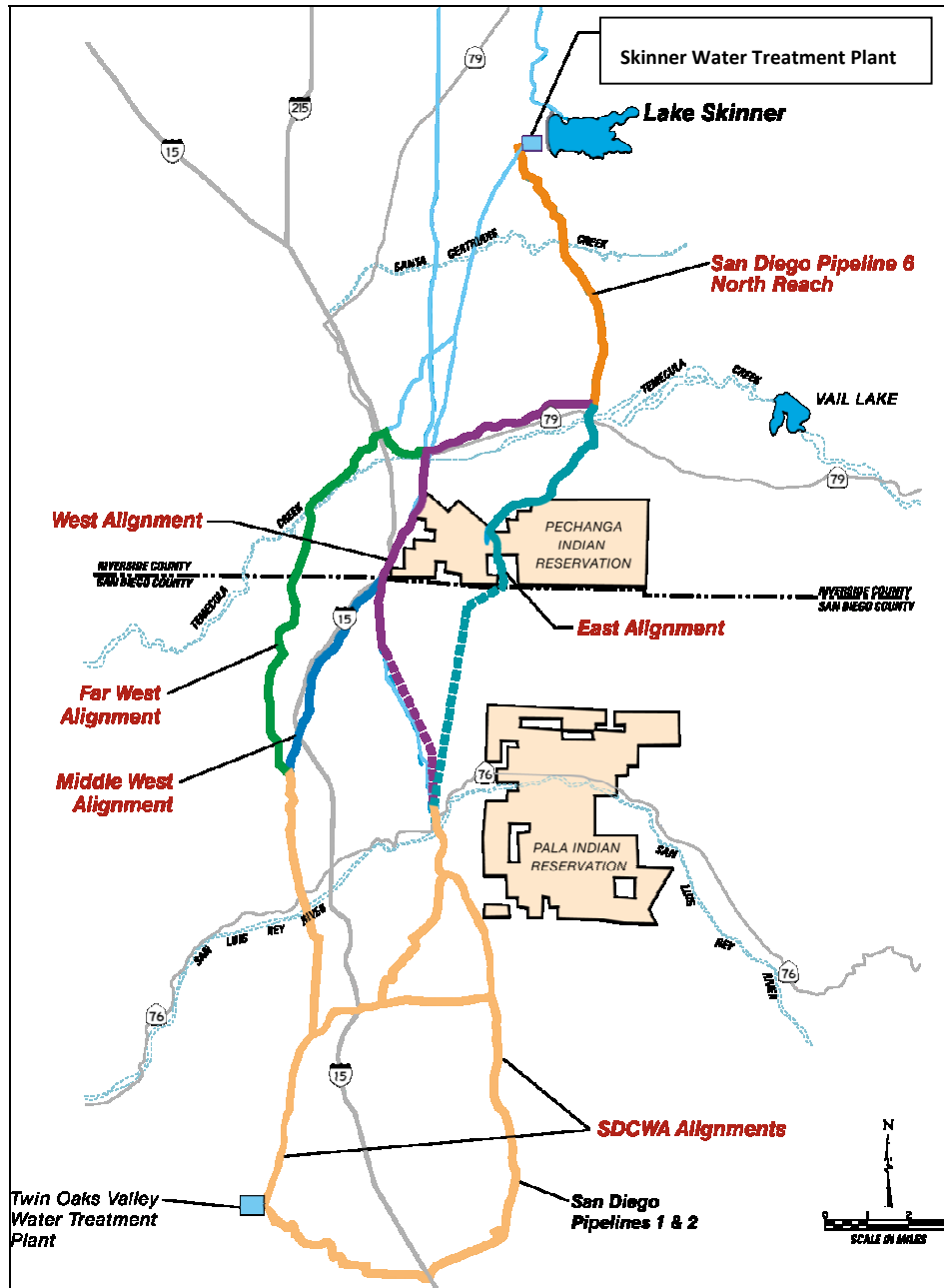


Figure 3: Alternative alignments for the remaining portions of San Diego Pipeline No. 6

Supply and Delivery Reliability (cont.):

Skinner Water Treatment Plant Expansion No. 4: This program includes construction of a new 110-mgd water treatment module (Module No. 7) and supporting facilities. Module No. 7 commenced operation in July 2007, while Wastewater Reclamation Plant No. 3 and a coal removal structure were completed in December 2006. Construction of the Chemical Systems Modifications was completed in October 2007. All chemical systems under this program have been placed into service. The reclaimed washwater return pumping station, which is under the Skinner ORP construction contract, was placed into service in March 2009 (Figure 4). Remaining work includes the completion of project close-out activities, such as preparation of record drawings. The program is to be completed in fiscal year 2008/09 and is on schedule and within budget.



Figure 4: Paving around reclaimed washwater return pumping station

Infrastructure Reliability:

Conveyance and Distribution System Rehabilitation Program: This program was initiated to maintain reliable deliveries through specific repair and rehabilitation projects on Metropolitan’s pipelines, reservoirs, and control structures. The program currently contains 36 active projects, while 39 have been completed. Recent activities include the following:

- Middle Feeder Cathodic Protection – This project will install cathodic protection stations along the Middle Feeder to protect the pipeline from corrosion. Final design is complete and advertisement for bids is scheduled for June 2009.
- Lake Skinner East Bypass Screening Structure Rehabilitation – This project involves rehabilitation of the existing screening structures, enabling the removal of algae mats and other floating debris. Installation of the new trash racks was completed during a March shutdown, while construction is continuing on the screening structure and support facilities (Figure 5). Construction is 40 percent complete and is scheduled to be completed by October 2009.
- OC-71 Service Connection Fire Repairs – This project will repair fire damage caused by the 2007 wildfires. Construction is 60 percent complete and is scheduled to be completed by July 2009.
- Valve Replacement for San Fernando Tunnel at Magazine Canyon – This project involved the replacement of an inoperable 24-inch submerged valve located approximately 160 feet below ground surface in the Magazine Canyon Shaft. Construction is now complete.
- Lake Skinner Outlet Conduit – This project will repair three distressed pipe segments on the Lake Skinner Outlet Conduit. Preliminary design is complete. Final design was authorized by the Board in May 2009 and is scheduled for completion by October 2009.

The program is on schedule to be completed in fiscal year 2018/19 and is within budget.



Figure 5: Installation of new trash racks at Lake Skinner East Bypass Screening Structure.

Infrastructure Reliability (cont.):

Diemer Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and to improve operating efficiency of the Diemer plant through specific improvements projects. There are 22 active projects, while 7 have been completed. Recent activities include the following:

- Diemer North Access Road – Final design is approximately 99 percent complete and is scheduled to be completed in May 2009.
- Finished Water Reservoir and East Washwater Tank Seismic Upgrades – Final design is 25 percent complete and is scheduled to be completed by November 2009 (Figure 6).
- Filter Outlet Conduit Seismic Upgrades – This study is 75 percent complete and is scheduled to be completed by September 2009.
- New Fire and Potable Water Pump Station – Final design is 50 percent complete and scheduled to be completed by January 2010.
- Public Address System Upgrades – Final design is 55 percent complete and is scheduled to be completed by September 2009.
- Filter Valves Replacement – Preliminary design is 50 percent complete and is scheduled to be completed by September 2009.
- Electrical Improvements – Preliminary design is 40 percent complete and is scheduled to be completed by September 2009.

The program is on schedule to be completed in fiscal year 2015/16 and is within budget.



Figure 6: Washwater tank to be seismically upgraded

Infrastructure Reliability (cont.):

Quagga Mussel Control Program: This program includes a comprehensive plan that incorporates enhanced detection, surveillance and mitigation strategies for controlling quagga mussel growth. This program will be conducted in at least three phases. Phase I addressed immediate quagga mussel detection, surveillance and mitigation strategies for the first seven months of infestation, which has been completed. Phase II consists of a comprehensive, multi-year approach for mussel management, and Phase III will address long-term needs and cost minimization strategies. Phase II currently includes the following five projects:

- Copper Basin Interim Chlorination Facility – The interim chlorination system was placed into service in June 2008. The roof cover over the tank farm is 10 percent complete and is scheduled to be completed by August 2009.
- Lake Mathews Interim Chlorination Facility – The interim chlorination system was placed into service in November 2008. A roof cover construction contract was advertised for bids on May 4, 2009, and the bid opening date is scheduled for June 4, 2009.
- Design of Permanent Chlorination Facilities at Various Locations – Staff is developing a research strategy for new quagga mussel control approaches to be used at Metropolitan’s raw water conveyance systems and water treatment plants. The research is scheduled to be completed by mid-2009.
- Isolation Gates Along the Colorado River Aqueduct – A study is being conducted which identifies alternatives for controlling quagga mussels on the Intake Pumping Plant trash racks. One alternative is to isolate the pumping plant from Lake Havasu using metal or Hypalon barriers, then treat the water inside the barrier with chlorine to kill the mussels. Another alternative may be to replace the trash racks with new racks especially coated to resist quagga colonization. Various coatings are currently being tested for resistance to quaggas. A meeting is to be scheduled in June 2009 to review alternatives and to make a recommendation on which alternative to pursue.
- Relocation of Chlorine Injection at Skinner Plant – The chlorine injection point on the Lake Skinner Outlet Conduit must be relocated to a point downstream of the new ozone contactor inlet connection to avoid chlorinated water from entering the contactors. Construction is 50 percent complete and is scheduled to be completed by June 2009 (Figure 7).



Figure 7: New chlorine injection manhole

Infrastructure Reliability (cont.):

Weymouth Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and to improve operating efficiency of the Weymouth plant through specific improvement projects. The program currently contains 30 active projects, while 9 have been completed. Recent activities include the following:

- Weymouth Coagulant Tank Farm – Construction is 38 percent complete and is scheduled to be completed by December 2010 (Figure 8).
- Weymouth Electrical Upgrade Project – Final design is 92 percent complete and is scheduled to be completed by July 2009.
- Inlet Conduit Relocation and Rapid Mix Project – Final design is complete. The project was advertised for bids on April 15, 2009. A request to the Board to award a construction contract is planned for July 2009.
- Junction Structure Seismic Upgrades – This project will repair leaky valves and will seismically upgrade the Junction Structure. Final design is 60 percent complete and is scheduled to be completed by November 2009. A request to the Board to award a procurement contract for the inlet valves is planned for August 2009.
- Weymouth Reservoir Inlet Gates Replacement – Preliminary design is 90 percent complete and is scheduled to be completed by July 2009.
- Weymouth Filter Rehabilitation – Final design to rehabilitate four filters is 90 percent complete and is scheduled to be completed by July 2009.

The program is on schedule to be completed in fiscal year 2012/13 and is within budget.



Figure 8: Weymouth new polymer tank farm construction – looking northwest

Water Quality:

All Facilities – Install Roofs for Chemical Tank Farms: This program consists of installation of roof canopies over chemical tank farms at the Jensen, Mills, and Weymouth treatment plants. Roof canopies prevent rainwater from entering the containment areas, where it would need to be treated as contaminated waste.

- Construction of the roof structures at the Mills and Weymouth tank farms is complete.
- Construction of the Jensen fluoride tank farm roof structure is complete. Final design of the roof canopies at the Jensen caustic soda chemical storage area, ferric chloride, and sulfuric acid tank farms has been deferred based on Metropolitan's updated CIP prioritization criteria. Figure 9 shows the Jensen caustic tank farm that is planned to be covered once the project is approved to move forward.

The program is on schedule to be completed in fiscal year 2009/2010 and is within budget.



Figure 9: Jensen Caustic Tank Farm

Water Quality (cont.):

Oxidation Retrofit Program: This program was established to add ozone to provide disinfection, to control tastes and odors, and to reduce the level of disinfection by-products in the finished water at all five of Metropolitan's treatment plants. Ozone will enable Metropolitan to meet state and federal drinking water regulations. Recent activities include the following:

- **Mills Plant** – A construction contract to add two new ozone contactors to upgrade the plant's ozonation capacity to 326 mgd is approximately 92 percent complete and is scheduled to be completed by July 2009. Fabrication of additional ozone equipment is approximately 50 percent complete and is scheduled to be completed by August 2009. Installation and testing of equipment is scheduled to be completed by December 2010.
- **Jensen Plant** – The plant's ozone system became fully operational in July 2005.
- **Skinner Plant** – ORP general construction is nearing completion, which is expected in the third quarter of 2009. The contractor will not finish the work by the contract completion date of late May 2009, and is utilizing overtime and additional resources to execute the work. The ozone equipment vendor, Ozonia North America, continues to inspect and test the ozone equipment installed by the contractor.
- **Weymouth Plant** – This program consists of multiple, staged construction contracts. Final design of a new plant inlet conduit, which will relocate the existing conduit from beneath the Administration Building to the location of the planned ozone contactors, is complete and was advertised for bids in April 2009. The Weymouth ozone facilities are currently scheduled to be completed by late 2014.
- **Diemer Plant** – Construction of ozone facilities commenced in August 2008 and is approximately 20 percent complete (Figure 10). Construction is scheduled to be completed by mid-2012. Fabrication of ozone equipment is approximately 90 percent complete and is scheduled to be completed by September 2009.



Figure 10: Diemer ORP Ozone Generation Building and Contactors

Regulatory:

Chlorine Containment and Handling Facilities: This program includes construction of facilities to handle and contain chlorine to prevent a chlorine leak and to ensure compliance with security and safety regulations. Recent activities include the following:

- **Water Treatment Plants** – Chlorine containment facilities are operational at each of Metropolitan’s five treatment plants.
- **Chemical Unloading Facility (CUF)** – Preliminary design is underway for a chlorine containment facility, and is scheduled to be completed by November 2009. Final design is also underway for a dechlorination system, which is scheduled to be completed by July 2009. Figure 11 shows the existing CUF unloading operation that will be performed inside the future containment building.
- **Filter Outlet Chlorine Capacity Increase Projects** – Final design is underway for the Mills, Jensen and Skinner facilities. Construction of the Mills facility is scheduled to be completed by late 2009, while the Jensen facility is scheduled to be completed by mid-2010. Construction of the Skinner facility is scheduled to be completed by late-2009. Future Board actions are planned to initiate designs for the Diemer and Weymouth projects.

The program is on schedule to be completed in fiscal year 2015/16 and is within budget.



Figure 11: Existing CUF unloading operation



**MONTHLY PROGRESS REPORT
OF CONSTRUCTION AND PROCUREMENT CONTRACTS
APRIL 2009**

(Progress Through April 25, 2009)

Summary of Progress		
	Construction	Related Procurement
Number of Contracts	21	4
Total Bid Amount of Contracts in Progress	\$ 907,549,423	\$ 45,501,420
Number of Contracts Awarded This Month	1	0
Total Bid Amount of Contracts Awarded This Month	\$ 1,535,000	\$ -
Contract Gross Earnings This Month*	\$ 23,725,135	\$ 766,995

**Note: Earnings reflected in this report represent the value of the work performed by the contractor through the 25th day of the month. Earnings include contract retention and other similar deductions from amounts earned by the contractor but otherwise required to be withheld by Metropolitan by law or by contract. Further, payments are made in the month following the performance of the work. For these reasons, contract payments reflected in Metropolitan's financial system will be less than the earnings shown in this report until the final payment has been made to the contractor.*

Contracts Awarded This Month

Contract No. 1677, Joseph Jensen Water Treatment Plant Administration Building Seismic Upgrades, in the amount of \$1,535,000, was awarded to Brutoco Engineering & Construction, Inc. The project consists of seismic upgrade of the Joseph Jensen Water Treatment Plant Administration Building including fabrication and installation of structural steel and concrete beams, cross bracing, connections, electrical work, asbestos abatement, and other related work.

Contracts Completed This Month

Contract No. 1628, Henry J. Mills Water Treatment Plant Chemical System Upgrades, was completed on March 26, 2009, and the notice of completion was recorded on March 30, 2009.

Contract No. 1661, Robert B. Diemer Water Treatment Plant West Washwater Tank Refurbishment, was completed on April 6, 2009, and the notice of completion was recorded on April 9, 2009.

Contract No. 1674, Phase 2 Enhanced Vapor Recovery Systems for Desert Region, was completed on April 17, 2009, and the notice of completion was recorded on May 5, 2009.

Summaries/Status of Contracts

The summaries/status of current construction and construction-related procurement contracts are provided on the following pages.

Summary of Construction Contracts (Page 1 of 2)

Cont. No.	Spec. No.	Feature	Contractor	Contract Amount	Earnings This Month	Earnings To Date	Net Extra Work To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
Inland Feeder Contract				Projected Cost to Complete							
1542	1437	Arrowhead Tunnels Project ¹	J. F. Shea Const Inc/Kenny Const Co., JV	\$ 397,000,000	\$ 8,908,130	\$ 346,566,686	N/A	8/2/02	11/15/10	3/10	87%
Inland Feeder Totals				\$ 397,000,000	\$ 8,908,130	\$ 346,566,686	\$ -				
Other Contracts				Bid Amount							
1609	1483	Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	Shimmick Construction/Obayashi Corp., JV	\$ 184,650,000	\$ 3,686,204	\$ 200,502,124	\$ 1,646,113	7/28/05	5/19/09	7/09 ²	99%
1628	1517	Henry J. Mills Water Treatment Plant Chemical System Upgrades	J. R. Filanc Construction Co., Inc.	\$ 19,914,600	\$ 196,481	\$ 20,641,280	\$ 726,680	5/2/06	3/26/09	4/09	100%
1650	1549	Henry J. Mills Water Treatment Plant Ozone Contactors Nos. 3 and 4	C.W. Roen Construction Co.	\$ 14,556,000	\$ 582,049	\$ 13,662,669	\$ 213,637	7/25/07	7/2/09	7/09	93%
1651	1589	Perris Valley Pipeline North Reach	W.A. Rasic Construction Co., Inc.	\$ 39,250,000	\$ 44,720	\$ 37,999,192	\$ 199,502	8/7/07	10/23/08	6/09	96%
1653	1568	CRA Reliability Program Phase 6	Abhe & Svoboda, Inc.	\$ 3,382,110	\$ 580,777	\$ 1,800,424	\$ 18,114	10/8/07	5/8/09	11/09 ²	53%
1659	1584	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 4	Spiniello Companies	\$ 1,447,500	\$ 75,000	\$ 589,619	\$ -	6/13/08	7/6/09	7/09	41%
1660	1597	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 5	Zusser Company, Inc.	\$ 1,278,500	\$ 65,400	\$ 621,592	\$ -	6/20/08	7/10/09	7/09	49%
1661	1439A	Robert B. Diemer Water Treatment Plant West Washwater Tank Refurbishment	Abhe & Svoboda, Inc.	\$ 1,053,100	\$ -	\$ 1,071,978	\$ 3,668	6/13/08	4/6/09	4/09	100%
1663	1608	Perris Valley Pipeline, South Reach	Oscar Renda Contracting, Inc.	\$ 22,300,000	\$ 623,750	\$ 5,175,748	\$ -	9/4/08	1/12/10	1/10	23%
1664	1574	F.E. Weymouth Water Treatment Plant Coagulant Tank Farm Modifications	Orion Construction Corp.	\$ 10,437,000	\$ 1,091,625	\$ 3,761,710	\$ -	6/30/08	12/3/10	12/10	36%

¹ Earnings for this project are as of March 25, 2009.

² Time extension pending.



Summary of Construction Contracts (Page 2 of 2)

Cont. No.	Spec. No.	Feature	Contractor	Contract Amount	Earnings This Month	Earnings To Date	Net Extra Work To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Other Contracts (cont'd)		Bid Amount							
1665	1598	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 6	Cora Constructors, Inc.	\$ 1,609,100	\$ 126,600	\$ 1,197,990	\$ -	7/2/08	7/16/09	7/09	74%
1667	1500	Robert B. Diemer Water Treatment Plant Oxidation Retrofit Program	Shimmick Construction/Obayashi Corp. JV	\$ 188,080,588	\$ 5,652,245	\$ 32,656,601	\$ 65,421	8/15/08	6/1/12	6/12	17%
1668	1619	Skinner Water Treatment Plant Solar Power Generation Facility	SunPower Corporation, Systems	\$ 9,984,000	\$ 1,567,218	\$ 9,600,355	\$ -	8/6/08	5/28/09	6/09 ²	96%
1669	1575A	Union Station Tenant Improvements	W.E. O'Neil Construction Co. of California	\$ 162,457	\$ -	\$ 153,457	\$ -	8/22/08	1/9/09	5/09	94% ³
1672	1616	Lake Skinner East Bypass Screening Structure Rehabilitation	Gantry Constructors, Inc.	\$ 4,591,500	\$ 176,946	\$ 1,469,417	\$ -	9/17/08	10/20/09	10/09	32%
1673	1557	Joseph Jensen Water Treatment Plant Solids Thickeners 5 and 6	Brutoco Engineering & Construction, Inc.	\$ 5,499,000	\$ 211,000	\$ 1,268,970	\$ -	10/28/08	3/22/10	3/10	23%
1674	1644	Phase 2 Enhanced Vapor Recovery Systems for Desert Region	Fleming Environmental Inc.	\$ 314,135	\$ -	\$ 292,484	\$ -	10/27/08	4/17/09	4/09	100%
1675	1645	Phase 2 Enhanced Vapor Recovery Systems for Western Region	American Construction & Environmental Services, Inc.	\$ 288,833	\$ 66,185	\$ 188,785	\$ -	10/27/08	5/4/09	5/09	65%
1676	1646	Phase 2 Enhanced Vapor Recovery Systems for Eastern Region	Environmental Project Services, Inc.	\$ 216,000	\$ 70,805	\$ 213,500	\$ (2,500)	10/30/08	5/1/09	5/09	99%
1677	1613	Joseph Jensen Water Treatment Plant Administration Building Seismic Upgrades	Brutoco Engineering & Construction, Inc.	\$ 1,535,000	\$ -	\$ -	\$ -	5/7/09	3/9/10	3/10	0%
				\$ 510,549,423	\$ 14,817,005	\$ 332,867,895	\$ 2,870,635				
Total Value of Construction Contracts in Progress				\$ 907,549,423	\$ 23,725,135	\$ 679,434,581	\$ 2,870,635				

² Time extension pending.

³ Contract substantially complete. Punch list work remains.





Summary of Construction and Procurement Contracts Completed This Month Pending Final Payment


Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Estimated Final Earnings	Estimated Total Net Value of Extra Work	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
1628	1517	Henry J. Mills Water Treatment Plant Chemical System Upgrades	J. R. Filanc Construction Co., Inc.	\$ 19,914,600	\$ 20,665,129	\$ 750,529	3/26/09	3/30/09	5/25/09
1661	1439A	Robert B. Diemer Water Treatment Plant West Washwater Tank Refurbishment	Abhe & Svoboda, Inc.	\$ 1,053,100	\$ 1,086,978	\$ 33,878	4/6/09	4/9/09	6/5/09
1674	1644	Phase 2 Enhanced Vapor Recovery Systems for Desert Region	Fleming Environmental Inc.	\$ 314,135	\$ 292,484	\$ (21,651)	4/17/09	5/5/09	6/16/09


Summary of Procurement Contracts

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Earnings This Month	Earnings to Date	Starting Date	Delivery Date	
1582	1480	Oxygen/Ozone System Equipment for the Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program	Ozonias North America	\$ 8,409,000	\$ -	\$ 6,299,641	6/22/04	12/30/09	Payments on this contract are made quarterly
1622	1515A	Oxygen/Ozone System Equipment for the Robert B. Diemer and F. E. Weymouth Water Treatment Plants Oxidation Retrofit Program	Ozonias North America	\$ 15,733,300	\$ -	\$ 10,285,141	2/2/06	6/3/10	Payments on this contract are made quarterly
1645	1547	Steel Pipe and Fittings for Perris Valley Pipeline	Northwest Pipe Company	\$ 17,955,170	\$ 766,995	\$ 15,371,089	3/5/07	4/30/09	
1655	1604	Henry J. Mills Water Treatment Plant Ozone System Reliability Upgrade Equipment	Ozonias North America	\$ 3,403,950	\$ -	\$ 383,530	1/17/08	12/18/09	Payments on this contract are made quarterly
Total Value of Procurement Contracts in Progress				\$ 45,501,420	\$ 766,995	\$ 32,339,401			

<p>Contract No. 1542 Specifications No. 1437 Contractor: J. F. Shea Const Inc/Kenny Const Co., JV</p>	<p>Inland Feeder Program Arrowhead Tunnels Project</p>
<p>Scope of Work: The project consists of purchasing two tunnel boring machines (TBMs); excavating two 12-foot interior finished diameter tunnels; constructing three portal structures; furnishing and installing a precast concrete segmental liner and a final liner for the Arrowhead West tunnel. Project modified to a cost reimbursable contract effective April 26, 2006.</p>	
<p>At a Glance: Estimated Percent Complete 87% Estimated Completion Date March 2010</p>	
<p>Details: Projected Cost to Complete \$397,000,000 Earnings To Date \$346,566,686 * Earnings This Month \$8,908,130 * Contract Start 8/2/02 Contract Completion 11/15/10</p>	<p>Installation of last pipe in Arrowhead West Tunnel</p>
<p>Contract No. 1609 Specifications No. 1483 Contractor: Shimmick Construction/Obayashi Corp., JV</p>	<p>Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3</p>
<p>Scope: The work consists of construction of buildings and water treatment structures, washwater reclamation plant, chemical and liquid oxygen facilities, cooling water pump station, power substation, switchgear building, and associated work.</p>	
<p>At a Glance: Estimated Percent Complete 99% Percent Extra Work 0.9% Estimated Completion Date July 2009</p> <p>Details: Bid Amount \$184,650,000 Earnings To Date \$200,502,124 Net Extra Work To Date \$1,646,113 Earnings This Month \$3,686,204 Net Extra Work This Month \$365,574 Contract Start 7/28/05 Duration in Working Days 865 Contract Completion 5/19/09 **</p>	

*Earnings for this project are as of March 25, 2009.

<p>Contract No. 1628 Specifications No. 1517 Contractor: J. R. Filanc Construction Co., Inc.</p>	<p>Henry J. Mills Water Treatment Plant Chemical System Upgrades</p>
<p>Scope: The work consists of construction of new chlorine containment facility including truck unloading and acid storage buildings, evaporator room, injection facility, and chlorine scrubber areas.</p>	
<p>At a Glance:</p> <p>Percent Complete 100% Percent Extra Work 3.6% Completion Date April 2009</p>	
<p>Details:</p> <p>Bid Amount \$19,914,600 Earnings To Date \$20,641,280 Net Extra Work To Date \$726,680 Earnings This Month \$196,481 Net Extra Work This Month \$186,853 Contract Start 5/2/06 Duration in Working Days 360 Actual Contract Completion 3/26/09</p>	
<p>Completed chlorine containment facility</p>	

<p>Contract No. 1650 Specifications No. 1549 Contractor: C.W. Roen Construction Co.</p>	<p>Henry J. Mills Water Treatment Plant Ozone Contactors Nos. 3 and 4</p>
<p>Scope: The work consists of constructing two new contactors, installing Metropolitan-furnished ozone equipment, and making tie-ins to existing process and utility lines within the existing contactor structure.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 93% Percent Extra Work 1.5% Estimated Completion Date July 2009</p>	
<p>Details:</p> <p>Bid Amount \$14,556,000 Earnings To Date \$13,662,669 Net Extra Work To Date \$213,637 Earnings This Month \$582,049 Net Extra Work This Month \$100,462 Contract Start 7/25/07 Duration in Working Days 460 Contract Completion 7/2/09</p>	
<p>Fabrication of concrete wall forms</p>	

Contract No. 1651
 Specifications No. 1589
 Contractor: W.A. Rasic Construction Co., Inc.

Perris Valley Pipeline North Reach

Scope:
 The project consists of installing approximately 2.7 miles of large-diameter welded steel pipe. The work includes excavation; tunneling; pipe installation and welding; street improvements; construction of service connection EM-23; furnishing and installing valves and related piping; constructing manhole, blow-off, and other cast-in-place reinforced concrete vault structures; and electrical instrumentation and equipment.



At a Glance:

Estimated Percent Complete	96%
Percent Extra Work	0.51%
Estimated Completion Date	June 2009

Placement of median curb on Alessandro Blvd.

Details:

Bid Amount	\$39,250,000
Earnings To Date	\$37,999,192
Net Extra Work To Date	\$199,502
Earnings This Month	\$44,720
Net Extra Work This Month	\$0
Contract Start	8/7/07
Duration in Working Days	250
Contract Completion	10/23/08

Contract No. 1653
 Specifications No. 1568
 Contractor: Abhe & Svoboda, Inc.

CRA Reliability Program Phase 6

Scope:
 The project consists of rehabilitating deteriorated slide gates and upgrading electrical equipment at the San Jacinto Diversion Structure, and replacing valves and installing a security fence at the Desert Water/Coachella Valley discharge structure located at the Whitewater River.



At a Glance:

Estimated Percent Complete	53%
Percent Extra Work	0.54%
Estimated Completion Date	November 2009

Details:

Bid Amount	\$3,382,110
Earnings To Date	\$1,800,424
Net Extra Work To Date	\$18,114
Earnings This Month	\$580,777
Net Extra Work This Month	\$0
Contract Start	10/8/07
Duration in Working Days	400
Contract Completion	5/8/09 *

*Time extension pending. Shutdown for February/March 2009 rescheduled to October/November 2009.

Contract No. 1659
 Specifications No. 1584
 Contractor: Spiniello Companies

Scope:
 The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Beverly Hills, Burbank, Carson, Downey, Gardena, Glendale, Inglewood, La Mirada, Los Angeles, Norwalk, Santa Fe Springs, Torrance, West Hollywood, and portions of Los Angeles County.

At a Glance:
 Estimated Percent Complete **41%**
 Percent Extra Work **0.00%**
 Estimated Completion Date **July 2009**

Details:
 Bid Amount **\$1,447,500**
 Earnings To Date **\$589,619**
 Net Extra Work To Date **\$0**
 Earnings This Month **\$75,000**
 Net Extra Work This Month **\$0**
 Contract Start **6/13/08**
 Duration in Working Days **240**
 Contract Completion **7/6/09**



Installation of pipe extension located in Los Angeles

Contract No. 1660
 Specifications No. 1597
 Contractor: Zusser Company, Inc.

Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 5

Scope:
 The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Burbank, San Fernando, and the communities of



At a Glance:
 Estimated Percent Complete **49%**
 Percent Extra Work **0.00%**
 Estimated Completion Date **July 2009**

Details:
 Bid Amount **\$1,278,500**
 Earnings To Date **\$621,592**
 Net Extra Work To Date **\$0**
 Earnings This Month **\$65,400**
 Net Extra Work This Month **\$0**
 Contract Start **6/20/08**
 Duration in Working Days **240**



Excavated trench pipe trench for new pipe located in Burbank

Contract Completion **7/10/09**

Contract No. 1661 Specifications No. 1439A Contractor: Abhe & Svoboda, Inc.	Robert B. Diemer Water Treatment Plant West Washwater Tank Refurbishment
Scope: The project consists of abrasive blasting and recoating of the exterior and interior surfaces of a steel water storage tank; seismic retrofit; tank disinfection; repairing trusses, beams, roof, hatch cover, and vent structure.	
At a Glance: Percent Complete 100% Percent Extra Work 0.35% Completion Date April 2009	
Details: Bid Amount \$1,053,100 Earnings To Date \$1,071,978 Net Extra Work To Date \$3,668 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 6/13/08 Duration in Working Days 150 Actual Contract Completion 4/6/09	Completed refurbishment of West Washwater Tank
Contract No. 1663 Specifications No. 1608 Contractor: Oscar Renda Contracting, Inc.	Perris Valley Pipeline South Reach
Scope: The project consists of constructing approximately 4 miles of 97-inch diameter fabricated steel pipeline with Service Connections EM-24 and WR-35.	
At a Glance: Estimated Percent Complete 23% Percent Extra Work 0.00% Estimated Completion Date January 2010	
Details: Bid Amount \$22,300,000 Earnings To Date \$5,175,748 Net Extra Work To Date \$0 Earnings This Month \$623,750 Net Extra Work This Month \$0 Contract Start 9/4/08 Duration in Working Days 340 Contract Completion 1/12/10	Preparation of trench for pipe laying

Contract No. 1664
Specifications No. 1574
Contractor: Orion Construction Corp.

**F.E. Weymouth Water Treatment Plant
Coagulant Tank Farm Modifications**

Scope:
The project consists of retrofitting the existing alum/ferric storage and feed facilities, installation of a new roof canopy over the existing coagulant tank farm, construction of modifications to the alum/ferric tank farm, installation of a new polymer tank farm, demolition and removal of the existing storage building, carbon tank facility, and mechanical maintenance shop (Building No. 6), and an underground storage tank.



At a Glance:
Estimated Percent Complete **36%**
Percent Extra Work **0.00%**
Estimated Completion Date **December 2010**

Details:
Bid Amount **\$10,437,000**
Earnings To Date **\$3,761,710**
Net Extra Work To Date **\$0**
Earnings This Month **\$1,091,625**
Net Extra Work This Month **\$0**
Contract Start **6/30/08**
Duration in Working Days **595**
Contract Completion **12/3/10**

Placement of precast electrical vault

Contract No. 1665
Specifications No. 1598
Contractor: Cora Constructors, Inc.

**Air Release and Vacuum Valve Relocation for
Treated Water Pipelines - Construction Package No. 6**





Scope:
The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Brea, Buena Park, Fullerton, Placentia, Stanton, and





At a Glance:
Estimated Percent Complete **74%**
Percent Extra Work **0.00%**
Estimated Completion Date **July 2009**

Details:
Bid Amount **\$1,609,100**
Earnings To Date **\$1,197,990**
Net Extra Work To Date **\$0**
Earnings This Month **\$126,600**
Net Extra Work This Month **\$0**
Contract Start **7/2/08**
Duration in Working Days **240**
Contract Completion **7/16/09**


Placement of concrete enclosure pads located in Yorba Linda


<p>Contract No. 1667 Specifications No. 1500 Contractor: Shimmick Construction/Obayashi Corp. JV</p>	<p>Robert B. Diemer Water Treatment Plant Oxidation Retrofit Program</p>
<p>Scope: The project consists of constructing an ozone generation building, ozone contactors, contactor inlet and outlet conduits, an underground contactor rejection tunnel, liquid oxygen (LOX) storage and feed system, chemical feed facilities, unit substation, switchgear building, emergency generator building, and large diameter yard conduits and piping.</p>	
<p>At a Glance: Estimated Percent Complete 17% Percent Extra Work 0.03% Estimated Completion Date June 2012</p>	
<p>Details: Bid Amount \$188,080,588 Earnings To Date \$32,656,601 Net Extra Work To Date \$65,421 Earnings This Month \$5,652,245 Net Extra Work This Month \$0 Contract Start 8/15/08 Duration in Working Days 950 Contract Completion 6/1/12</p>	<p>Placement of rebar for lower retaining wall</p>
<p>Contract No. 1668 Specifications No. 1619 Contractor: SunPower Corporation, Systems</p>	<p>Skinner Water Treatment Plant Solar Power Generation Facility</p>
<p>Scope: The project consists of providing all equipment and constructing a 1 MW photovoltaic solar power generation facility including ground-mount solar panels on single or dual axis tracking platforms, equipment pads, canopies, inverters, lighting, weather station, monitoring system, chain link fence and gates.</p>	
<p>At a Glance: Estimated Percent Complete 96% Percent Extra Work 0.00% Estimated Completion Date June 2009</p>	
<p>Details: Bid Amount \$9,984,000 Earnings To Date \$9,600,355 Net Extra Work To Date \$0 Earnings This Month \$1,567,218 Net Extra Work This Month \$0 Contract Start 8/6/08 Duration in Working Days 200 Contract Completion 5/28/09 *</p>	<p>New electrical equipment for solar power plant</p>

*Time extension pending.

<p>Contract No. 1669 Specifications No. 1575A Contractor: W.E. O'Neil Construction Co. of California</p>	<p>Union Station Tenant Improvements</p>
<p>Scope: The project consists of the addition of storage/work space for the 4th and 5th floors including demolition, modification of lightning and HVAC system, interior walls, custom millwork cabinetry, flooring, painting, ceiling, electrical, and communications. This is a reimbursable project for the tenant, the State of California Division of State Architect (DSA).</p>	
<p>At a Glance: Estimated Percent Complete 94% Percent Extra Work 0.00% Estimated Completion Date May 2009</p>	
<p>Details: Bid Amount \$162,457 Earnings To Date \$153,457 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 8/22/08 Duration in Working Days 80 Contract Completion 1/9/09 *</p>	<p>Completed millwork in open office area</p>
<p>Contract No. 1672 Specifications No. 1616 Contractor: Gantry Constructors, Inc.</p>	<p>Lake Skinner East Bypass Screening Structure Rehabilitation</p>
<p>Scope: The project consists of removing and disposing of the existing two inoperative screens; designing, furnishing, and installing three new dual flow rotating screens, four trash racks, and one slide gate; refurbishing existing algae removal facilities; and removing and replacing the existing emergency generator and fuel tanks.</p>	
<p>At a Glance: Estimated Percent Complete 32% Percent Extra Work 0.00% Estimated Completion Date October 2009</p>	
<p>Details: Bid Amount \$4,591,500 Earnings To Date \$1,469,417 Net Extra Work To Date \$0 Earnings This Month \$176,946 Net Extra Work This Month \$0 Estimated Contract Start 9/17/08 Duration in Working Days 260 Contract Completion 10/20/09</p>	<p>Traveling water screen shaker units</p>

*Contract substantially complete. Punch list work remains.

Contract No. 1673 Specifications No. 1557 Contractor: Brutoco Engineering & Construction, Inc.	Joseph Jensen Water Treatment Plant Solids Thickeners 5 and 6
Scope: The project consists of constructing two gravity solids thickeners and a sludge vault; replacing three centrifugal pumps, two rotary lobe pumps, and two sludge scraper rake gearboxes; adding one rotary lobe pump; installing four annular feed rings on four existing gravity solids thickeners; reconfiguring piping systems; and performing sitework. The work also includes removal of PCB-containing joint sealants and PCB-contaminated concrete, construction and expansion joint cleaning and preparation, sealant placement in construction and expansion joints, and replacement of wood boards in Sedimentation Basin No. 3.	
At a Glance: Estimated Percent Complete 23% Percent Extra Work 0.00% Estimated Completion Date March 2010	
Details: Bid Amount \$5,499,000 Earnings To Date \$1,268,970 Net Extra Work To Date \$0 Earnings This Month \$211,000 Net Extra Work This Month \$0 Contract Start 10/28/08 Duration in Working Days 340 Contract Completion 3/22/10	Placement of concrete for Thickener Tank No. 6 walls

Contract No. 1674 Specifications No. 1644 Contractor: Fleming Environmental Inc.	Phase 2 Enhanced Vapor Recovery Systems for Desert Region
Scope: The project consists of upgrading the existing gasoline-fuel stations with new vapor recovery equipment to comply with California Air Resources Board Phase 2 Enhanced Vapor Recovery Rule at Metropolitan's Eagle Mountain, Gene, Hinds, and Iron Mountain Pumping Plants.	
At a Glance: Percent Complete 100% Percent Extra Work 0.00% Completion Date April 2009	
Details: Bid Amount \$314,135 Earnings To Date \$292,484 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 10/27/08 Duration in Working Days 120 Actual Contract Completion 4/17/09	Vapor recovery tank at Gene Pumping Plant

Contract No. 1675
 Specifications No. 1645
 Contractor: American Construction & Environmental Services, Inc.

Phase 2 Enhanced Vapor Recovery Systems for Western Region

Scope:
 The project consists of upgrading the existing gasoline-fuel stations with new vapor recovery equipment to comply with California Air Resources Board Phase 2 Enhanced Vapor Recovery Rule at Metropolitan's Jensen Plant, Sunset Garage, Soto Street, and Weymouth Plant.



Testing and fire inspection at Jensen Plant

At a Glance:
 Estimated Percent Complete **65%**
 Percent Extra Work **0.00%**
 Estimated Completion Date **May 2009**

Details:
 Bid Amount **\$288,833**
 Earnings To Date **\$188,785**
 Net Extra Work To Date **\$0**
 Earnings This Month **\$66,185**
 Net Extra Work This Month **\$0**
 Contract Start **10/27/08**
 Duration in Working Days **120**
 Contract Completion **5/4/09**

Contract No. 1676
 Specifications No. 1646
 Contractor: Environmental Project Services, Inc.

Phase 2 Enhanced Vapor Recovery Systems for Eastern Region


Scope:
 The project consists of upgrading the existing gasoline-fuel stations with new vapor recovery equipment to comply with California Air Resources Board Phase 2 Enhanced Vapor Recovery Rule at Metropolitan's Lake Mathews, Mills Plant, and Skinner Plant.



Installation of spill bucket at Mills Plant

At a Glance:
 Estimated Percent Complete **99%**
 Percent Extra Work **-1.2%**
 Estimated Completion Date **May 2009**

Details:
 Bid Amount **\$216,000**
 Earnings To Date **\$213,500**
 Net Extra Work To Date (Credit) **-\$2,500**
 Earnings This Month **\$70,805**
 Net Extra Work This Month (Credit) **-\$2,500**
 Contract Start **10/30/08**
 Duration in Working Days **120**
 Contract Completion **5/1/09**

Contract No. 1677 Specifications No. 1613 Contractor: Brutoco Engineering & Construction, Inc.	Joseph Jensen Water Treatment Plant Administration Building Seismic Upgrades
Scope: The project consists of seismic upgrade of the Joseph Jensen Water Treatment Plant Administration Building including fabrication and installation of structural steel and concrete beams, cross bracing, connections, electrical work, asbestos abatement, and other related work.	
At a Glance: Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date March 2010	
Details: Bid Amount \$1,535,000 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 5/7/09 Duration in Working Days 210 Contract Completion 3/9/10	
Jensen Administration Building	