



- Board of Directors
Engineering and Operations Committee

7/10/2012 Board Meeting

8-5

Subject

Authorize staff to proceed with an option to enhance solids handling capability of the Joseph Jensen Water Treatment Plant

Description

At the February 13, 2012 meeting of the Board's Engineering and Operations Committee, a motion was passed to defer action for 90 days regarding authorization of final design of the planned Solids Dewatering Facility and Lagoons at the Joseph Jensen Water Treatment Plant. The time extension was provided for the Los Angeles Department of Water and Power (LADWP) and Metropolitan to develop additional project alternatives. Staff from both agencies has collaborated and identified a new option which would address the needs of each agency, and would reduce Metropolitan's initial capital costs to enhance the Jensen plant's solids handling capability. As a result, an overview of two options was orally presented at the May 7, 2012 committee meeting, and details of the two options were presented via an information letter at the June 11, 2012 committee meeting. The two options for moving forward with solids handling facilities for the Jensen plant are described below.

The action for Option No. 1 would authorize Metropolitan's General Manager to negotiate a 50-year use agreement with LADWP which would allow Metropolitan to initially use existing LADWP lagoons and then construct new lagoons on LADWP property, to support Jensen plant residual solids production over the 50-year term of the agreement. This option would defer the construction of mechanical solids dewatering at the Jensen plant, thereby reducing up-front capital expenditures. This option would also minimize the near-term impact on Metropolitan's treated water surcharge.

The action for Option No. 2 would authorize final design of a staged, on-site Solids Dewatering Facility and Lagoons project at the Jensen plant, as originally presented to the Engineering and Operations Committee in February 2012. This project would enable on-site dewatering of water treatment residual solids, increase washwater recovery, and improve plant operational flexibility and reliability. This option would also authorize professional services agreements by two consulting firms to provide specialized technical support.

Both options are consistent with Metropolitan's long-term plan for solids handling at the Jensen plant, which is to thicken and dewater all residual solids on-site at the plant, based on the full plant capacity of 750 million gallons per day (mgd).

Staff's recommendation is to proceed with Option No. 1.

Timing and Urgency

The Jensen facility is Metropolitan's only water treatment plant which does not have on-site solids dewatering capability to process thickened residual solids. Currently, the Jensen plant relies on a combination of two processes for solids handling: air-drying of solids in two LADWP lagoons, and discharge to the city of Los Angeles sanitary sewer. Under design conditions, the existing LADWP lagoons can accommodate only 15 percent of the Jensen plant's maximum capacity solids disposal needs, while sewer discharge can only

accommodate an additional 25 percent. Thus, unless improvements are undertaken, the long-term, reliable Jensen flowrate may be reduced from 750 mgd to 300 mgd.

Given the variability of State Water Project supply deliveries and water quality, the planned solids handling facilities are needed to meet short-term, high-solids loading and long-term, reliable treatment capacity at the Jensen plant. Since the Jensen plant commenced operation in 1972, nine high-turbidity events have occurred, which required either temporary storage of solids in lagoons or excessive discharge to the sanitary sewer. At the present time, any increased sewer discharges above the limitations contained in Metropolitan's discharge permit would require discretionary approval by the City of Los Angeles. Sewer disposal is not considered a feasible alternative for accommodating short-term, high-solids loading unless these limitations are changed.

Staff recommends moving forward with this project to provide solids handling facilities to support 500 mgd of plant capacity. This project has been reviewed with Metropolitan's updated Capital Investment Plan (CIP) prioritization criteria and is categorized as a Cost-Efficiency/Productivity project. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2012/13.

Background

The Jensen plant was placed into service in 1972 with an initial capacity of 400 mgd. The plant was expanded in the early 1990s to its current capacity of 750 mgd. The Jensen plant exclusively treats water from the West Branch of the State Water Project, and delivers it to Metropolitan's Central Pool portion of the distribution system and to service areas in the western portion of the distribution system.

Residual chemicals and settled solids collected from the Jensen plant's sedimentation basins are currently thickened on-site and then air-dried at two nearby LADWP lagoons on the Los Angeles Aqueduct Filtration Plant (LAAFP) site. This cooperative arrangement was initiated in February 2005 and is under negotiation to be extended. Under the existing Metropolitan-LADWP agreement, Metropolitan may use two of LADWP's lagoons while Metropolitan's land for planned on-site Jensen lagoons is used for recreational purposes. Currently, the LADWP lagoons have sufficient capacity to process only 15 percent of the solids generated at the Jensen plant's maximum flowrate at design conditions. Solids produced at the Jensen plant may also be discharged to the sanitary sewer. However, sewer disposal is expensive and is limited by the discharge permit. For example, in 2005, when all of the Jensen plant's solids were discharged into the sanitary sewer for several weeks in a row, the discharge fees totaled approximately \$70,000 per day. Under maximum plant capacity of 750 mgd, the sewer discharge can only accommodate approximately 25 percent of the solids generated at the plant's maximum flowrate. Thus, unless improvements are undertaken, the long-term, reliable Jensen flowrate may be reduced from 750 mgd to 300 mgd.

In September 2008, Metropolitan's Board authorized preliminary design phase activities for an on-site Jensen Solids Dewatering Facility and Lagoons project. A combination of on-site mechanical dewatering and air-drying lagoons was selected to improve plant operational flexibility and reliability. A combination of these two processes is required for an on-site project because a lagoon-only option would require excessive amounts of land, while a mechanical-dewatering-only option could not process the very high volumes of solids produced during storm events, which can double the solids generated under normal design conditions. Based on an assessment of future process space needs and geotechnical conditions at the Jensen plant, staff recommended at the February 2012 Board committee meeting that the on-site lagoons and the mechanical dewatering facility be located at the southern portion of the plant. The proposed location for the on-site lagoons is currently used by the Los Angeles Department of Recreation and Parks, which permits use of the property by the Granada Hills Youth Recreation Center, Inc. This organization operates and maintains several soccer and baseball fields for youth sports at this location.

The property used for youth sports is operated during daylight hours only. This property shares a boundary with the southeastern portion of the Jensen plant site. A chain link fence separates the two facilities. Public users of the sports fields gain access directly from a public street, and do not need to enter through the Jensen plant. If Metropolitan permits extended use of the sports fields, staff recommends upgrading the fencing to meet Metropolitan's long-term security objectives.

Two options for proceeding with upgrades to the Jensen solids handling facilities are presented below. Option No. 1 would authorize negotiations for a 50-year use agreement with LADWP, under the terms specified below, which would allow Metropolitan to use lagoons on LADWP property. This option would meet Metropolitan's long-term solids handling needs while allowing the local youth sports operation to continue at the current location. Under this option, Metropolitan would enter into a 45-year use agreement for continued use of the ballfields at the Jensen plant site, contingent upon the LADWP solids lagoon use agreement remaining in effect. This option addresses the five criteria discussed at the Board's Engineering and Operations Committee meeting held on May 7, 2012: to provide a long-term solution, operational reliability, acceptable site conditions, financial benefit, and assured performance and risk management.

Option No. 2 would appropriate funds and authorize final design of the staged Solids Dewatering Facility and Lagoons project at the Jensen plant, as originally proposed to the Engineering and Operations Committee in February 2012. This option would provide a long-term solution for solids handling at the Jensen plant, but would require significant initial capital investment.

Option No. 1 – Negotiation for Long-Term Use of LADWP Lagoons (No funds required)

This option was developed via collaborative discussions between LADWP and Metropolitan staff. It would address the needs of both agencies, reduce Metropolitan's initial capital expenditures, and minimally impact Metropolitan's treated water surcharge at this time. The cornerstone of this option will be a 50-year use agreement between LADWP and Metropolitan, which would support an alternative plan for solids handling for the Jensen plant. With this option, Metropolitan would rely on lagoons at the LAAFP site for air-drying a portion of the Jensen plant's residual solids.

During the 50-year term of the use agreement, LADWP will allow Metropolitan to use four lagoons at the LAAFP site. Four existing lagoons will be rehabilitated by LADWP for Metropolitan's initial use. During the first ten years of the agreement, Metropolitan will construct two new lagoons on the LAAFP site and return two of the original lagoons to LADWP for its own use. LADWP will also design, construct, and operate a groundwater management system, at no cost to Metropolitan, so that high groundwater does not impact lagoon construction and/or operation.

The four lagoons are expected to have sufficient capacity to process 50 percent of the solids generated during 500-mgd plant operation at design conditions. During the past few years, the Jensen plant has been processing all Jensen solids using only two LADWP lagoons due to favorable source-water quality and low water demand in its service area. If this trend continues, four LADWP lagoons could support the expected near-term water demand of 500 mgd. Under the proposed agreement, LADWP will pay for any discharge of Jensen plant solids to the city of Los Angeles sanitary sewer. LADWP will continue to pay for the sanitary sewer discharges for the period prior to completion of the two new lagoons at the LAAFP site and the on-site mechanical dewatering facility at the Jensen plant, until October 1, 2024. With the use of the two rehabilitated LADWP lagoons and two new lagoons, it is expected that construction of the mechanical dewatering facility at the Jensen plant may be deferred seven years or longer, reducing upfront capital expenditures.

Before the mechanical dewatering facility is operational, if the treated water demand increases significantly or water quality degrades substantially over a short period of time, the capacity of the four solids lagoons (and sewer discharge) may be insufficient to meet Metropolitan's needs. In this case, Metropolitan may temporarily contract with a belt-press vendor to dewater the solids while commencing to design and construct the mechanical solids dewatering facility.

Terms to be incorporated into the use agreement include:

- LADWP will allow Metropolitan to use four solids lagoons on LADWP property at no cost, for a term of 50 years.
- LADWP will refurbish four existing solids lagoons for Metropolitan's initial use, and allow Metropolitan to construct two new lagoons in the future (to replace two of the initial lagoons), including conducting site characterization analyses to determine the baseline conditions of the four existing lagoons and two new lagoons.

- LADWP will construct and operate groundwater management facilities to minimize the impact of groundwater infiltration on the four existing lagoons and two new lagoons used by Metropolitan.
- LADWP will reimburse Metropolitan for all sanitary sewer disposal costs until Metropolitan constructs the two new lagoons at the LAAFP site and a permanent mechanical dewatering facility at the Jensen plant, until October 1, 2024.
- LADWP will indemnify, defend, and release/hold harmless Metropolitan from any liability due to occurrence/presence of hazardous waste to the extent permitted by law.
- Metropolitan will provide a no-cost lease for use of ballfields at the Jensen plant for a term of 45 years, contingent upon the LADWP solids lagoon use agreement remaining in effect.
- Metropolitan will construct two new lagoons on LADWP property at its cost, and will relinquish use of two existing LADWP lagoons within ten years.
- Metropolitan will construct a new solids transfer system from the Jensen plant to the LADWP lagoons.
- Metropolitan will prepare environmental documents related to the 50-year use agreement and the solids transfer system.
- If after completing its feasibility study and preliminary design, Metropolitan determines that it is feasible and cost-effective to construct the new lagoons on LADWP property, Metropolitan will prepare environmental documents in the future for the two new lagoons. Metropolitan and LADWP will equally share in the cost for preparation of the documentation and for mitigation for the new lagoons. Construction of the new lagoons will not proceed until further technical and CEQA analyses are completed, and all applicable project approvals are obtained.
- LADWP will secure pre-construction site permits for the two future lagoons, and Metropolitan will secure construction-related permits.
- If Metropolitan determines that construction of the new lagoons is not feasible or cost-effective, or that the groundwater management facilities are not operated and maintained to minimize groundwater infiltration impacts, Metropolitan may terminate use of the lagoons and ballfields, and Metropolitan will have five years to transition off the use of LADWP's lagoons and to construct its own lagoons on Metropolitan property.
- Metropolitan will be responsible for all solids that exceed Title 22 waste standards, including removal and cleanup as required.
- Similar to standard tenant obligations, Metropolitan agrees to indemnify and hold LADWP harmless for any of Metropolitan's actions or omissions on LADWP's property that cause LADWP damages excluding any damages that arise from any commingling with LADWP's solids or water for which LADWP is solely responsible.

The scope for Option No. 1 includes staff activities to further develop the LADWP-Metropolitan agreement.

In the future, a new solids dewatering facility will be constructed at the Jensen plant to support the plant's full 750-mgd capacity.

Option No. 1 Summary

The action for Option No. 1 authorizes negotiations with LADWP to develop a 50-year use agreement for Metropolitan use of LADWP lagoons. No funds are required to be appropriated at this time.

Under this option, staff would return to the Board in approximately October 2012 for authorization to initiate preliminary design of a solids transfer system, and preparation of environmental documentation for the work necessary for years 1 to 11. Staff will also return to the Board in approximately February 2013 for certification of the environmental documentation and for authorization to enter into the use agreement, provided it has been approved by LADWP and the city of Los Angeles. Further environmental analyses will be performed prior to construction of the two new lagoons, when the preliminary design and feasibility studies for those facilities are completed. If Metropolitan is unable to finalize the agreement with LADWP in accordance with the terms described above, staff will instead return to the Board to request authorization of Option No. 2, which is described below.

Option No. 1 Project Milestones

October 2012 (Approximately) – Recommendation to Metropolitan’s Board to authorize preliminary design, and preparation of environmental documentation for the work necessary for years 1 to 11.

February 2013 (Approximately) – Final recommendation to Metropolitan’s Board to authorize the General Manager to execute the 50-year use agreement, or to approve Option No. 2.

Option No. 2 - Jensen Solids Dewatering Facility and Lagoons, Stage 1 – Final Design Phase (\$6.9 million)

This option would move forward at this time with Metropolitan’s long-term plan for solids handling at the Jensen plant, which is to thicken and dewater all residual solids on-site. This plan would be executed in two stages. During Stage 1, Metropolitan will add an on-site solids dewatering facility and lagoons to provide cost-effective, reliable solids handling of up to 500 mgd of the Jensen plant’s water treatment capacity. These facilities will support reliable long-term plant water production. In the future, additional belt presses and ancillary equipment will be added during Stage 2 to process the remaining 250 mgd of plant capacity.

Preliminary design of the Jensen solids handling facilities has been completed. The scope of the planned Stage 1 includes the addition of a new mechanical dewatering facility, lagoons, decant and filtrate pumping stations, and support facilities; modifications to the existing dry polymer building and solids thickening system; and electrical ductbank replacement. The lagoons and mechanical dewatering facility will be sized to process sufficient residual solids to support the Jensen plant’s near-term water demand of 500 mgd. If the required level of solids production exceeds this capacity, the city of Los Angeles sewer permit may need to be revised to increase discharge capacity to the sewer, pending expansion of the mechanical dewatering facility to its ultimate capacity. Revision of Metropolitan’s sewer discharge permit is subject to discretionary approval of the city of Los Angeles.

The on-site lagoons will be sized to process approximately 30 percent of the residual solids produced at the Jensen plant’s maximum flowrate, while the solids dewatering facility will be sized to process the remaining amount. The capacity of the lagoons has been determined based on the available on-site space. The lagoons will be used as the primary means to dewater solids because of their lower operation and maintenance cost. In addition, the lagoons will be used to process peak solids production resulting from extreme water quality events, such as occurred in the winter of 2004/05, when highly turbid water entered the Jensen plant and required greatly increased application of coagulants and polymers to treat the water.

Final design phase activities will include detailed field investigations, engineering design, preparation of drawings and specifications, preparation of environmental-related documents, acquisition of permits, development of a construction cost estimate, receipt of competitive bids, and all other activities in advance of award of a construction contract. The detailed field investigations will include detailed geotechnical investigations, hazardous material testing, and utility potholing. Due to its size and unique location, the Jensen lagoon system is expected to be classified as a dam and thereby fall under the jurisdiction of the California Division of Safety of Dams (DSOD). The DSOD-related activities will include permitting, inundation mapping, conducting hazard analyses, and value engineering. The environmental documentation will include technical studies and a revision of the draft environmental impact report (Draft EIR).

The Draft EIR was prepared during preliminary design of the Jensen Solids Dewatering Facility and Lagoons project, and was circulated for public comment. Subsequently, a new project alternative was identified which includes a different on-site location for the solids dewatering facility. This new alternative will require additional environmental studies.

The action for Option No. 2 appropriates \$6.9 million and authorizes final design phase activities for Stage 1 of the Jensen Solids Dewatering Facility and Lagoons project. Final design will be performed by Metropolitan staff with specialized assistance from MWH Americas, as described below. Environmental documentation is recommended to be prepared by Environmental Science Associates, as described below. The requested funds include \$3,776,000 for final design; \$564,000 for the detailed field investigations; \$461,000 for permitting; \$235,000 for environmental documentation; \$241,000 for third-party value engineering reviews; \$63,000 for utility easements and right-of-way support; \$655,000 for community outreach, project management, bid advertisement and award, and project controls; and \$905,000 for remaining budget.

The anticipated cost of final design for Option No. 2 is approximately 12 percent of the estimated total construction cost. Engineering Services' goal for design of projects with construction costs greater than \$3 million is 9 to 12 percent. The construction cost for this option is anticipated to range from \$28.5 million to \$34.5 million.

Under this option, staff would return to the Board at a later date for certification of the EIR and adoption of the Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program. Staff would also return to the Board at a later date for award of a construction contract.

Technical Engineering Support – New Professional Services Agreement (MWH Americas)

MWH Americas prepared the preliminary design report for the Jensen Solids Dewatering Facility and Lagoons project, and is recommended to provide technical support, including electrical system design, under a new professional services agreement. This work is highly specialized, and Metropolitan has insufficient technical staff in-house to conduct the electrical system design. MWH was selected through a competitive process via Request for Qualifications No. 927. For this agreement, Metropolitan has established a Small Business Enterprise (SBE) participation level of 18 percent. The scope of work will include electrical system design, specialized technical support relating to solids handling, and updates to preliminary design documents.

The action for Option No. 2 authorizes an agreement with MWH Americas, in an amount not to exceed \$1,025,000, to provide design and technical support services for the Jensen Solids Dewatering Facility and Lagoons project.

Environmental Documentation – Amendment to Existing Agreement (ESA)

Environmental Science Associates (ESA) prepared the Draft EIR for the Jensen Solids Dewatering Facility and Lagoons project and is recommended to perform additional technical studies (addressing issues such as air quality, traffic, and noise) and prepare environmental documents under an existing professional services agreement. This work is specialized and Metropolitan has insufficient resources in-house to perform these activities. ESA was selected through a competitive process via Request for Qualifications No. 763. Amendment of the existing ESA agreement is consistent with the agreement's scope of work, and with the planned approach for project implementation. For this agreement, Metropolitan has established an SBE participation level of 18 percent.

The action for Option No. 2 authorizes an increase of \$135,000 to the existing agreement with ESA, for a new not-to-exceed total of \$465,000, to prepare environmental documentation for the Jensen Solids Dewatering Facility and Lagoons project.

Other Specialized Support – No Actions Required

Hydraulic surge analyses for the Jensen Solids Dewatering Facility and Lagoons project are recommended to be conducted by Northwest Hydraulics Consultants, Inc. under an existing professional services agreement. Northwest Hydraulics Consultants, Inc. was selected through a competitive process via Request for Qualifications No. 971; no amendment to the existing agreement is required. For this agreement, Metropolitan has established an SBE participation level of 18 percent. The estimated cost for these services is \$20,000.

Inundation mapping for the Jensen Solids Dewatering Facility and Lagoons project will be performed by West Consultants, Inc. under an existing professional services agreement. West Consultants, Inc. was selected through a competitive process via Request for Qualifications No. 971; no amendment to the existing agreement is required. For this agreement, Metropolitan has established an SBE participation level of 18 percent. The estimated cost for these services is \$90,000.

Geotechnical investigations, risk analyses, and aquifer tests will be performed by two geotechnical consultants under two new professional services agreements, selected through a competitive process via Request for Qualifications No. 931. These agreements are planned to be awarded by the General Manager under his Administrative Code authority. For each of these agreements, Metropolitan has established an SBE participation level of 18 percent. The estimated total cost for these services is \$125,000.

Three value engineering sessions are planned for the Jensen Solids Dewatering Facility and Lagoons project. One session will address design-related issues and two sessions will address constructability of the project. The work will be performed by value engineering consultants under existing professional services agreements, selected through a competitive process via Request for Qualifications No. 949; no amendment to the existing agreements is required. For these agreements, Metropolitan has established an SBE participation level of 18 percent. The estimated cost for these services is \$139,000.

Groundwater sampling and water quality analyses are recommended to be performed by WorleyParsons under an existing professional services agreement. WorleyParsons was selected through a competitive process via Request for Qualifications No. 962; no amendment to the existing agreement is required. For this agreement, Metropolitan has established an SBE participation level of 18 percent. The estimated cost for these services is \$40,000.

Option No. 2 Summary

The action for Option No. 2 appropriates \$6.9 million; authorizes final design phase activities for Stage 1 of the Jensen Solids Dewatering Facility and Lagoons project; authorizes an agreement with MWH Americas; and authorizes an amendment to the existing agreement with Environmental Science Associates.

This work has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2012/13 capital expenditure plan. The project is included within capital Appropriation No. 15371, the Jensen Improvements Program, which was initiated in fiscal year 2001/02. Other projects authorized under Appropriation No. 15371 include the Jensen Ferric Chloride Retrofit, Filter Media Replacement, Solids Thickeners Nos. 5 & 6, and the Administration Building Seismic Upgrades. With Option No. 2, the total funding for Appropriation No. 15371 will increase from \$32,304,521 to \$39,204,521. See [Attachment 1](#) for the Financial Statement and [Attachment 2](#) for the Location Map.

Option No. 2 Project Milestones

July 2014 - Completion of final design

August 2016 – Completion of construction

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities (Section 15378(b)(2) of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action is not subject to the provisions of CEQA pursuant to Section 15378(b)(2) of the State CEQA Guidelines.

CEQA determination for Option #2:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action consists of funding, design, and basic data collection activities, which do not result in a serious or major disturbance to an environmental resource. This may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #3:

None required

Board Options

Option #1

Adopt the CEQA determination and authorize negotiations with the Los Angeles Department of Water and Power to develop a 50-year use agreement for Metropolitan use of LADWP solids lagoons.

Fiscal Impact: None

Business Analysis: This option will support reliable, long-term plant operation for a plant flowrate of 500 mgd, and will reduce up-front capital expenditures. The projected total cost to implement this option, including future facilities, is anticipated to range from \$42 million to \$52 million.

Option #2

Adopt the CEQA determination and

- a. Appropriate \$6.9 million;
- b. Authorize final design of Stage 1 of the Jensen Solids Dewatering Facility and Lagoons project to support 500 mgd of plant operation;
- c. Authorize an agreement with MWH Americas in an amount not to exceed \$1,025,000; and
- d. Authorize an increase of \$135,000 to the existing agreement with Environmental Science Associates, for a new not-to-exceed total of \$465,000.

Fiscal Impact: \$6.9 million of budgeted funds under Approp. 15371

Business Analysis: This option will support reliable, long-term plant operation for a plant flowrate of 500 mgd. The projected total cost to implement this option is anticipated to range from \$44 million to \$48 million.

Option #3


Do not authorize either Jensen solids handling project at this time.

Fiscal Impact: Due to the recent restrictions on State Water Project supplies, reduced demands in the Jensen service area, and favorable source water quality, all residual solids have been handled in recent years using the LADWP solids lagoons. When the Jensen plant's flowrate increases, or source water quality becomes unfavorable, the LADWP solids lagoons' capacity will be insufficient to handle all residual solids from the Jensen plant. The discharge of excess solids (those that exceed the LADWP lagoons' capacity) into the sanitary sewer is estimated to cost between \$3 million to \$5 million per year, based on an annual average plant flowrate of 300 mgd. This cost would increase with higher plant flowrates and unfavorable source-water quality. However, plant capacity would be limited based on discharge limitations to the sanitary sewer.

Business Analysis: This option would delay completion of the on-site solids lagoons and dewatering facility or rehabilitation of the LADWP lagoons for Metropolitan's use. After the current agreement for use of the LADWP lagoons expires, the Jensen plant would only discharge to the sanitary sewer. The city of Los Angeles sewer permit would need to be revised to increase the allowable annual volume of solids discharged to the sewer. Revision of Metropolitan's permit is subject to the discretionary approval of the city of Los Angeles.

Staff Recommendation

Option #1



Gordon Johnson
Manager/Chief Engineer,
Engineering Services

7/3/2012

Date



Jeffrey Lightinger
General Manager

7/3/2012

Date

Attachment 1 – Financial Statement

Attachment 2 – Location Map

Ref# es12607674

Financial Statement for Jensen Improvements Program – Option No. 2

A breakdown of Board Action No. 17 for Appropriation 15371 for final design of Stage 1 of the Jensen Solids Dewatering Facility and Lagoons project¹ is as follows:

	Appropriated Amount (Mar. 2011)	Current Board Action No. 17 (July 2012)	New Total Appropriated Amount
Labor			
Studies & Investigations (Site characterization)	\$ 1,024,850	\$ 270,000	\$ 1,294,850
Final Design	2,339,151	2,881,000	5,220,151
Owner Costs (Program mgmt., permitting, envir. doc., bidding process)	3,177,396	977,000	4,154,396
Construction Inspection & Support	2,024,000	-	2,024,000
Metropolitan Force Construction	2,153,400	-	2,153,400
Materials & Supplies	2,236,219	-	2,236,219
Incidental Expenses	164,380	213,000	377,380
Professional/Technical Services	4,011,327	25,000	4,036,327
MWH Americas	-	1,025,000	1,025,000
Environmental Science Associates	-	135,000	135,000
Northwest Hydraulics Consultants	-	20,000	20,000
West Consultants, Inc.	-	90,000	90,000
WorleyParsons	-	40,000	40,000
Geotechnical consultant	-	125,000	125,000
Value engineering consultant	-	139,000	139,000
Underground utility investigation firm	-	45,000	45,000
Hazardous material testing firm	-	10,000	10,000
Equipment Use	104,000	-	104,000
Contracts	14,357,506	-	14,357,506
Remaining Budget	712,292 ²	905,000	1,617,292
Total	\$ 32,304,521	\$ 6,900,000	\$ 39,204,521

Funding Request

Program Name:	Jensen Improvements Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15371	Board Action No.:	17
Requested Amount:	\$ 6,900,000	Capital Program No.:	15371-I
Total Appropriated Amount:	\$ 39,204,521	Capital Program Page No.:	308
Total Program Estimate:	\$ 99,213,000	Program Goal:	I-Infrastructure Reliability

¹ The total amount expended to date on the Jensen Solids Dewatering Facility and Lagoons project is approximately \$2.7 million.

² Includes previous reallocation of \$222,521 from a completed project to Remaining Budget for work completed below budget; and from Remaining Budget to the following projects: (1) \$45,000 for design work on the Jensen Entrance Improvements project to reflect differing site conditions; (2) \$160,500 for the value engineering-recommended geotechnical investigation and aerial surveying of the new mechanical dewatering facility location for the Jensen Solids Dewatering Facility and Lagoons project; and (3) \$67,760 for a change order to remove and dispose PCB-laden sealant for the Jensen Administration Building Seismic Upgrade project due to differing site conditions.

Joseph Jensen Water Treatment Plant

