

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Study Session Worksheet

Presentation Date: Time: 2:00pm Length: 1 hr
Presentation Title: CCSD#1 Wastewater Implementation Plan
Department: Water Environment Services
Presenters: Mike Kuenzi/Ted Kyle

ISSUE & BACKGROUND

The Board of Commissioners requested that staff prepare an implementation plan based on the Citizens Advisory Councils (CAC) final recommendation for future wastewater treatment within CCSD#1. This plan outlines the activities, decisions and processes for carrying the CAC recommendation through fruition.

OPTIONS AVAILABLE

The Board can take no action on the proposed plan, request that staff go back and modify the plan, or accept the plan as proposed and request that staff prepare the necessary orders to move the concept forward.


RECOMMENDATIONS

1. Staff is recommending that the Board accept the work plan as proposed
2. Direct staff to begin executing the technical work as proposed
3. Direct staff to prepare Board Orders establishing a Site Steering Committee
4. Direct staff to proceed with a regional stakeholder discussion regarding long term wastewater solutions
5. Schedule a work session to discuss future CAC role

QUESTION(S) PRESENTED FOR CONSIDERATION

Is it the Boards goal to decommission the Kellogg plant?

SCHEDULE FOR STUDY SESSION

Division Director/Head Approval 
Department Director/Head Approval _____
County Administrator Approval _____



Clackamas County Service District No. 1

Wastewater Treatment Facility Implementation Plan

November 28, 2006



**WATER
ENVIRONMENT
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A Department of Clackamas County

Clackamas County Service District No. 1

Treatment Facility Implementation Plan

Introduction

The Clackamas County Service District No. 1 (CCSD#1) Citizens Advisory Council (CAC) submitted its final four-part recommendation to the Board of County Commissioners on November 2, 2006. The full report and recommendation is stated in its report entitled, "Final Report and Recommendations to the Clackamas County Board of Commissioners (October 26, 2006)". A short summary of the recommendation is presented here for continuity.

After hearing considerable testimony, the Board directed staff to prepare an implementation plan for its consideration. The Plan outlines the processes, decisions, and timeline needed to implement the CAC recommendations.

CAC Recommendation Summary

1. Address near-term needs.
The CAC recommendation identified three actions to resolve the near term needs:
a) favorably resolve ammonia limits set by DEQ, b) restore the Kellogg plant's treatment capacity to 8 million gallons per day, and c) continue the temporary diversion to the Tri-City plant.
2. Build a new plant
The CAC recommends to, "Site and build a new treatment plant to provide long-term treatment capacity for CCSD#1..."
3. Decommission Kellogg
The CAC proposes to, "Decommission the Kellogg Plant sometime in the future only when it makes economic sense to do so to enable CCSD#1 to achieve long-term regulatory and economic efficiencies."
4. Continue CAC Responsibility
The CAC recommends, "meeting with the Board of County Commissioners in the near future to define the ongoing roles and responsibilities of the CAC."

Implementation Plan

The implementation plan identified herein encompasses the technical assessments, staff and committee activities and Board decisions that are required to implement the CAC's recommendation at the three affected wastewater treatment facilities; Kellogg, Tri-City, and the proposed new plant. The plan has been laid out in three parallel processes of discreet but interdependent activities as depicted on the attached flow chart titled "Treatment Facilities Implementation Plan, Process Chart."

Kellogg Plant

CCSD #1 has requested and has been granted a reconsideration of the Kellogg discharge permit that was recently issued by DEQ with respect to the ammonia limits set therein. Staff is fully engaged in this formal process with our attorneys and consulting team exploring the baseline conditions utilized by DEQ to establish the ammonia limits set forth in the permit. We are anticipating that this process should be concluded by the end of the year. Staff will continue to work diligently with DEQ to demonstrate that the current ammonia limitation should be revised. The reconsideration process will culminate in DEQ giving written notice to CCSD#1 that the existing permit conditions will either stand as issued or that they have concluded to revise the current limitations and issue a new permit that modifies, eliminates or delays the ammonia conditions until the next permit cycle (5 years). Staff is recommending that any decision or interim option to treat ammonia at the Kellogg plant not be employed until DEQ has formally issued their conclusion. This decision, coupled with the Board's direction on the ultimate disposition of Kellogg, will directly impact the technical and management approach employed to meet the ammonia limits to the extent that they remain part of the permit and will impact the investment needed to implement the technical concept.

Staff is also seeking direction from the Board as to whether it is their goal to decommission the Kellogg plant. This clarification permits staff to move down one of two courses: 1) determining what investment is required to keep the plant in operation for a short operating duration; or 2) determining what investment is needed to operate the plant for an indefinite period of time and designing a time and rate schedule for the capital investment. Staff is recommending that if it is the goal of the Board to decommission Kellogg, a 2012 –2015 timetable be established for this transition for the following reasons: 1) The capital program for a long operating scenario (beyond 2015) will translate into radically different short-term investment priorities; and 2) the 2012-15 decommissioning time frame covers one more permit cycle. DEQ would be less likely to upgrade Kellogg's permit limits in the next renewal cycle if we are committed to decommission the facility shortly thereafter.

Staff is also proposing to investigate whether it makes economic sense to consolidate the solids handling operations at the Tri-City plant at this time independent of the final disposition of Kellogg. Consolidation of the solids processing will provide CCSD #1 the opportunity to increase the odds of finding a suitable site for a new treatment plant by reducing the acreage needed for its footprint, reduce the odors at the Kellogg plant, facilitate neighborhood acceptance of a new facility by decreasing the odor generation, and finally, capture operational cost savings by consolidating staff and trucking logistics at one plant. In addition, the infrastructure required for transfer of solids may be able to be combined with the interim hydraulic diversion.

Interim Capacity

The CAC recommends continuing the diversion of sewage from CCSD#1 to the Tri-City plant in order to meet existing and near-term growth demands. Additional diversion from CCSD#1 and treatment capacity at Tri-City will need to be constructed to accommodate the near term growth in CCSD#1 and to offload the existing hydraulic pressures on Kellogg to provide some measure of operational flexibility and maintenance capability while a new plant is being sited, designed and built. Two technical issues need to be answered in order to carry through the CAC recommendation: 1) where to increase the diversion from CCSD#1 to Tri-City; and 2) how to expand the Tri-City plant to accommodate CCSD#1 flows without impacting the service commitments to Gladstone, Oregon City and West Linn. Once complete, new Intergovernmental Agreements will be drafted, negotiated and brought back to the Board for approval before any construction proceeds.

There are three major routes that will be considered for the diversion: 1) along SE River Road; 2) east along the 82nd Drive corridor; and 3) a pipe along the Trolley Trail. The Trolley Trail option will only be investigated if the consolidation of the solids handling processes indicates promise. Each of these routes has advantages and disadvantages. The first step for staff will be to complete preliminary sizing and routing studies along with developing the cost estimates for all of the diversion options. Staff's recommendation will also consider treatment plant capacities and their need for process redundancy and reliability.

Staff also proposes to immediately start the preliminary design to expand the treatment capacity at the Tri-City plant. The Tri-City plant is operating near its capacity limit with the current organic load diversion from CCSD#1. The implementation plan will build on the Tri-City Site Master Plan (nearing completion) with pre-design work, related cost estimates, cost allocation and rate impact analysis for both districts. As recommended by the CAC, the diversion agreement will need to be updated to reflect this new plan. Once an agreement is reached, the expansion will be permitted, designed, constructed and placed in service. This work will need to be completed within 24 months to ensure capacity is available to meet CCSD#1 growth demand. This strategy will also provide staff the opportunity to fully investigate, build and potentially operate a new technology solution (bio-membrane) at the Tri-City plant for a sufficient period of time to fully

understand the budgetary and staffing implications of adopting this technology at the new CCSD#1 plant.

New Plant

Staff is recommending that an ad-hoc site steering committee be established to identify a number of potential sites for a new plant. Staff is recommending that this committee be made up of representatives of the Economic Development Commission, Clackamas County Business Alliance, the Cities of Happy Valley, Milwaukie, and Damascus, Home Builders Association of Portland, Metro Committee for Citizen Involvement, a CCSD ratepayers, a representative from the environmental community and a member or two from the CAC. Additionally, once the potential sites are identified for further study, a representative of the adjacent neighborhood association should be appointed to this ad-hoc committee. Further, staff is recommending that the Chair of the Steering Committee be appointed by the Board and that the group be facilitated by John Lang. A memo written by John Lang outlining his proposed process for the Steering Committee is attached herein for the Boards information.

The Steering Committee's charter will be to recommend a preferred site to the Board and rank the other potential sites in order of preference. Several sites will need to be investigated through this process so that staff, under direction of the Board, can negotiate a fair price and perform the proper due diligence in case some condemnation of property becomes necessary.

The Steering Committee and John Lang will be supported by staff. Staff's first task will be to complete a generic pre-design for a new plant to support the committee's efforts to establish the appropriate property size criteria. The pre-design effort will later support staff's development of newer, more refined cost estimate for assessing the impact to CCSD#1 rates and to begin the capital and financial programming.

After the preliminary sites are identified, staff will perform Level I environmental investigations on each and develop cost estimates for the anticipated conveyance modifications needed to utilize the site. Finally, staff will review the potential permit issues with each site. All of this information will be submitted to the site committee for its consideration.

Staff will develop a rate analysis given the new plant pre-design and conveyance information prior to the Steering Committee recommending its preferred site to the Board. This rate analysis will enable the Board to compare the forecasted CCSD#1 rate to the Tri-City District rate thereby, providing the Board with the opportunity to reaffirm their commitment to a new plant prior to staff proceeding with procuring a site.

Once the decision is made to move forward, the detailed site investigation process and the decision process will move to staff level execution. The process will include negotiating a right-of-entry so that Level 2 environmental assessments can be made, and detailed appraisals will be prepared. Once all the information affecting property value is available, an offer can be tendered and the price negotiated. Relocation benefits and any tenant issues would also be worked out in this process. Condemnation would only be considered if reasonably willing sellers could not be found.

Permit negotiations will start once a purchase agreement is concluded or possession is granted by the court through condemnation. There are two major permits needed: 1) land use approval, and 2) DEQ discharge approval. Both of these permit applications will need a site-specific preliminary design. The applications can proceed in parallel, and once both permits are issued, final design, bidding and construction can start.

Cost and User Rate Impacts

Cost estimates and rate forecasts will be updated periodically throughout execution of the work. The Plan itself has been designed such that these updates will be followed by a decision point that will enable the Board and staff to re-affirm the strategic direction, fully understand the rate projections, and build a capital investment program that can be financed by CCSD#1. The existing margin of uncertainty in the cost estimates will narrow as the predesign and design activities move forward, supporting a rising confidence in the rate forecasts.

Regional Stakeholder Initiative

During the public hearings and in many communications with the Board, it became clear that any Treatment Facility Implementation Plan must involve the community partners. In addition to the ongoing role of the CAC and the ad-hoc Site Steering Committee, staff is recommending that a group of stakeholders that includes, at the minimum, elected representatives from cities served by the Tri-City Service District, Oak Lodge Sanitary District, the Cities of Damascus, Happy Valley, Lake Oswego and Milwaukie and a representative of the CAC be convened by the Board of County Commissioners to engage in a facilitated regional discussion on long-term partnerships and regional solutions.

Public Involvement

Public involvement has been a critical component in the strategic planning so far and will continue to be in this implementation process. The major public decisions represented as diamonds on our accompanying chart provide an example of some of the formal opportunities for involvement. The Site Steering Committee work to identify and screen

potential sites for a new plant will provide a parallel public process. It is staff's intent to develop a public involvement program once the implementation plan has been accepted by the Board.

Timeline

Table 1 outlines a rough timeline for major milestone events in this proposed implementation process assuming that Kellogg is decommissioned by 2015 and that a new plant can be sited and permitted.

Table 1
Timeline

Event	Date
Kellogg	
Decide Kellogg's future	December 2006
Start design of interim improvements	June 2007
Short-term improvements complete	June 2008
Long term improvements (if necessary)	Sept 2010
Decommission Kellogg	November 2012-2015
Interim Capacity	
Treatment plant permits approved	April 2007
Plant expansion startup	October 2008
New Plant	
Appoint Steering Committee	February 2007
Steering Committee Kickoff	April 2007
Select long-term plant site	March 2008
Property purchased	January 2009
Permits acquired	November 2009
Design ready for bid	February 2011
Plant startup	November 2012-2015