



Water Quality Management Committee

Regular Meeting Minutes

January 23, 2007, 1:30 p.m.

PPACG Conference Room

1. Call to order / Establish a quorum / Roll Call/ Introductions

Chairperson Jerry Jacobson, called the meeting to order at 1:30 P.M. and stated for the record that a quorum was established. Introductions were made and attending were:

Members

Bill Burks
Todd Dahlberg
Jerry Jacobson, Chairperson
Roy Heald
Matt Lewis
Mike McCarthy
Kip Peterson
Mike Poeckes
Walt Roberts
Carl Schueler
Jim Schultz
Dave Stanford
Mike Wicklund
Kathleen Williams

Representing

Woodmoor Water & Sanitation District
Colorado Springs Utilities
Academy Water & Sanitation District
Security Water & Sanitation District
USAFA
El Paso County Health Department
Cherokee Metropolitan District
Donala Water & Sanitation District
Schriever AFB
El Paso County
City of Woodland Park
Garden Valley Water & Sanitation District
Monument Sanitation District
Palmer Lake Sanitation District

PPACG Environmental Program Manager
PPACG Website & Publications Coordinator

Rich Muzzy
Jayne Blewitt

Guests

Roger Sams
Graham Thompson
Melanie Jollett
Luanne Rubey
Bill Keller
John Faulkner
John Popovich
Steve Sheffield
Charles Cothorn
Will Raatz

GMS, Inc.
URS
URS
Terra Nova Engineering, Inc.
Colorado Springs Airport
Colorado Springs Airport
Falcon Highlands Metropolitan District
Triview Metropolitan District
Springs Engineering
Burns & McDonnell

2. Agenda Approval

Todd Dahlberg moved to approve the agenda. Dave Stanford seconded the motion, which passed unanimously.

3. Public Comments – Items not on the agenda

There were no public comments.

4. Approval of the November 28, 2006 Meeting Minutes

Jim Schultz pointed out a typo on page three, the first paragraph, last sentence that says, “The other alternative that is being explored but is not much benefit to Falcon Highlands Metro District is to stop discharging water to the wetlands and to **can** stop accepting sewage and send it all into the Woodland Hills Metro District and hold it in storage on cold winter days.” It was suggested to remove the word “can”. Dave Stanford moved to approve the minutes as corrected. Jim Schultz seconded the motion, which passed unanimously.

5. Election of Officers

After some discussion with the current officers, Todd Dahlberg moved to retain the current slate of Officers through 2007, Dave Stanford seconded the motion, which passed unanimously.

6. Site Application for Falcon Highlands Reuse WWTP

On November 28, 2006 the Water Quality Management Committee reviewed the site application for the Falcon Highlands Reuse WWTP. A concern was raised by the applicant and the WQMC regarding the ability of the design that was chosen to meet their PEL's. The WQMC agreed that the site application needed to be revised and re-submitted to the WQMC to address how the facility intends to meet their PEL's and clarify that it conforms with CDPHE Regulation 84.

SARC comments that were made on the October 24, 2006 meeting for the Falcon Highlands Reuse WWTF were included in the site application packet that was reviewed by the WQMC on November 28, 2006. Additional information was also included in the packet.

Melanie Jollett of URS reviewed the main concerns that the committee had at the last meeting - the selection of treatment technologies did not contain documentation how they would meet the WQBEL and ADBAC limits. Melanie explained that documentation was included on how standards would be met and Regulation 84 requirements.

Graham Thompson went through the committee's comments from the SARC and gave the updates within the application since the last meeting. The revision has addressed the committee's concerns. A revised engineering report was included, and on pages 9-12 there are descriptions of the proposed technologies, effluent limits and references to Regulation 84. Appendix H has been added which reviews the detailed information regarding the technology systems that were looked at. All three systems can meet these requirements. URS will submit the three manufactures statements to demonstrate how they can meet both ammonia limits and let the State decide which limits they want to enforce.

Jim Schultz asked about the actual data that was supplied by the manufactures and if there was any further follow up to determine if they are currently using the technology and if they have real data regarding how standards will be met. Graham Thompson replied that they did not get treatment data for the systems and that it was taken at face value. Graham stated that Advantex is a company that he has worked with over the years. Dave Stanford reiterated that there is an abundance of data supplied on the company's website.

Jim Schultz asked for a clarification on page 8 of the report, in the middle paragraph that states that the UV disinfection will ensure meeting the total residual chlorine requirement and this is a part of reuse. Graham replied that the way that Ted wrote it, it means that since the system does not have

chlorination, there will not be a chlorine limit requiring de-chlorination on the discharge permit.

Jim Schultz had an additional comment regarding the revised costs, on page 9 of the revised report it has a revised cost estimate at \$760,000 on page 23 of the report and the site application it still has the total cost at \$400,000 which should be updates before it gets sent in. Graham stated that this will be corrected.

Jim Schultz asked if there will be any pump stations involved in this project. Graham Thompson answered that there will be small pump that pumps the water to the recirculation tank. Jim Schultz then asked in the case of a loss of electricity or the controls go out where does the wastewater go? Graham replied that it would go back into the recirculation tank and there would be a period of time (a few hours) before there would be a build up of wastewater and before it would discharge. Melanie added that there is the intent to have a back up generator included as a part of the facility. Dave Stanford added that in most cases the loss of power is due to lightening strikes and the designs have been changed so that there is lightening surge protection built into the system.

Jim Schultz recommended that the detention time calculations be included within the application to the state. Graham added that this will be addressed at the technical review with the state and the state will decide which system that meets all regulations and then that will be included within the facility design.

Jim Schultz moved to recommend approval of the Site Application for the Falcon Highlands Reuse Facility to the PPACG Board of Directors with the caveat that they include back up power and holding calculations when they submit this application to the State. Mike McCarthy seconded the motion which passed and an abstention from Dave Stanford.

7. Site Application for a Wastewater Pump Station for Colorado Springs Airport

Luanne Rubey of Terra Nova Engineering presented the design report for the Colorado Springs Airport Wastewater Pump Station. This facility will service the airport business park and initially it will be for a new army facility that will facilitate the new troops coming in. It is funded by the Federal government and the facility have been designed by the ACOE. The service area is 378 acres and consists of mixed use and commercial, office and light industrial use. The average flow at ultimate build out condition is 633,000 gallons per day. The wastewater will be pumped to the north where it will connect with the force main at the existing Drennan wastewater pump station and then it will flow north up to Airport Road and then to the Las Vegas WWTP.

Comments that were made at the January 11, 2007 Site Application Review Committee (SARC) meeting were:

- Clarification of service area to the lift station and plans for possible future growth and development.
- Ability to provide 1.5 hour emergency overflow storage at peak flow (3 hours at average daily flow) in the wet well.
- Correction to typographical error on page 8 that reads "Smith Creek" instead of Colorado Springs Airport Lift Station
- Clarification of the pumping rates for each of the pumps at peak flow.
- Discuss potential hydraulic issues and concerns where flows from the proposed lift station flow into the Drennan Lift Station interceptor.
- Ability to ensure financial capability to build lift station.
- Revise the deliver date in the report for the pump station

Jim Schultz addressed the primary issue of overflow storage. The intention of Colorado Springs Utilities were to have three hours of emergency storage. In the initial submittal there was three hours of wet well capacity but only one foot of that storage is above the high level alarm which allows only eight minutes of emergency storage before it starts to back up into the collection system. The SARC was concerned about the volume of emergency storage. The increase of width of one foot and five feet deeper with the wet well still does not bring it up to three hours storage. A more affordable alternative would be to make it wider or put in another wet well next to this one.

Rich Muzzy questioned whether the ACOE would have enough funding to provide the changes that are necessary. The federal appropriations for this project has been submitted and it is doubtful that they will be able to request a different amount of appropriations and the bill with which this is appropriated has not yet passed and the ACOE may have to go back and reprogram the money.

Bill Keller a Planner for the Colorado Springs Airport answered questions regarding funding by the ACOE. As it is a federal project, it is subject to appropriations and subject to the approval and authority of the U.S. Congress. Bill stated they are working with various congressional delegates from the region to ensure that it is going forward and there is a possibility that something may move forward in advance of the appropriations bill. The total budget for this project is \$55 million and will be received in a lump sum. Funding over in one area can be put into another area. This project has not yet gone to bid in order to test the market for pricing on such a project even with the revisions. Any misunderstanding on the depth of the wet well and overflow storage will be communicated to the Corps.

Rich Muzzy asked Todd Dahlberg his opinion as to whether or not CSU would operate and maintain the lift station if there was not three hours of overflow storage provided. Todd Dahlberg of CSU stated that at one time there was a requirement for less detention time than this due to the ability of crews to respond, but now the detention time requirements have increased accordingly. Todd stated that CSU would probably not accept a lift station without adequate detention time. This is a decision that will need to be made by others at CSU. Three hours of average flow detention time is not unreasonable. Rich Muzzy then asked if there are any restrictions to using the Drennan Wastewater pump stations for overflow. Jeff Daniels added that there are no restrictions but the Drennan pump time is 15 minutes and this would bring the total time of detention to 3 hours and 15 minutes.

Jim Schultz commented that this group does not care how this project provides the three hours overflow. It was not included in the original proposal and it was not included in the responses to the SARC's questions. There is the ability to make this work it just needs to add up to three hours and 15 minutes of overflow storage time.

Todd Dahlberg stated that the SARC was in favor of the design change such that the overflow would be accommodated and it would not be unreasonable for this group to approve a site application with this kind of recommendation from us to the State due to the time crunch that this project is in.

Jim Schultz moved to recommend approval of the Site Application for the Colorado Springs Airport Wastewater Pump Station to the PPACG Board of Directors contingent upon the approved design, including 3.25 hours of emergency storage above the high water alarm and providing firm pumping capacity for the proposed 880 gallon per minute peak flow. These caveats should be included in the direction/motion to the Board so that this will go forward in the same manner to the State. Dave Stanford seconded the motion which passed and an abstention from Todd Dahlberg.

8. Site Application for Fairplay Sanitation District Wastewater Treatment Plant (WWTP)

Will Raatz of Burns & McDonnell is working with the Fairplay Sanitation District on the proposed Fairplay Wastewater Treatment Plant (WWTP). This will replace the existing WWTP because the district has not been able to consistently achieve the permitted ammonia limits during cold months. In 1999, the district received more stringent effluent limits for ammonia nitrogen and was placed on a compliance schedule with the new limits taking effect in 2001. An *Ammonia Study Reliability Report* was prepared to determine how the district would comply with the ammonia limits.

On January 11, 2007 the Site Application Review Committee (SARC) reviewed the site application for the Fairplay Sanitation District Wastewater Treatment Plant. The SARC members agreed that the site application was contingent upon the following items:

- The signature line for the site application should be “Wayne Williams” and not “Richard Muzzy”.
- The values listed under Item 2 for the site application for %Domestic and %Industrial do not appear to be accurate.
- The amount of funding (Section 6.2) does not match the probable cost for the project. The cost should be revised to include total project costs, including Headworks Facility. Funding sources for the project should also be clarified including the probable increase in tap fees to pay for the project.
- The design population equivalents (PE) shown under Item 2, site application form do not appear to meet the design flow (0.4 MGD) or the 1724 lbs BOD/Day for the WWTP.
- Clarification of why such a large WWTP is being proposed. The current and future flows that are projected do not appear to warrant such a large WWTP.
- The site application form was not signed.
- Provide a warranty deed to show ownership of site.
- Report needs to reflect current I&I problems that were discussed at the SARC meeting.
- Provide calculations for the sizing of the aerobic digester.
- How was the possibility of changes to effluent limits in the future to address phosphorous and temperature addressed in the design of the new WWTP.
- Clarify the possibility to utilize one of the lagoon ponds for emergency storage in case of a power failure.
- Include a picture of the public notification sign of the proposed Fairplay WWTP.
- Include calculations of how the Maximum Monthly BOD loading rate of 517 mg/l was derived.

Will Raatz addressed the SARC comments that were made and sited the status of each of the items.

Todd Dahlberg asked who the actual applicant is for this project and said that the applicant should be either a duly elected representative of Fairplay or a designee. Dave Stanford replied that the application will be signed by Trevor Messa who is the President of the Fairplay Sanitation District.

Jim Schultz asked several questions regarding the 20-year population forecasts and the hydraulic and organic loading for the plant. Based on the population equivalent of 1,995 persons for the plant, the rated design capacity assumes over 200 gallons per capita per person is projected instead of the typical rate of 100 gallons per capita per person or less. The facility appears to be over designed – twice as large as necessary. Concern was expressed regarding the enormous cost of the plant - how it would be financed and the potential impact on the rate payers.

Dave Stanford stated that the rate study which was completed in September was based on \$7.5 million dollars. The original design for this facility was approved at 400,000 gallon per day and back in 2000

Fairplay went to the State to request that the facility be re-rated and they were not receptive to this idea. When the state ran their numbers it did not make that much of a difference between the calculations of 200,000 and 400,000 gallons per day.

The question was raised regarding the difference in flows from winter to summer regarding the part-time residences in the summer. Will Raatz replied that the 2006 flow report was just finished and there is not much difference between the two season's flows.

Jim Schultz stated that there is a big gap in the data to justify the design loading. The hydraulic and organic loading rates do not match up with the projected population in 20 years.

Todd Dahlberg asked for clarification on the cease and desist order and why it was issued -was it due to failure to meet ammonia limits. Dave Stanford stated that it was for failure to meet ammonia limits and that this is a community that did not always feel it was necessary to ask questions when they made changes at the wastewater facility. Upon arrival to this facility their chlorination system, de-chlorination system, discharge point and some other items had never been through the amendment process and the state health department was unaware that they existed.

Todd Dahlberg asked if the facility in its current condition has the ability to meet the ammonia limits and if it the capacity were re-rated and was to be reduced from 400,000 to 200,000 what is its ability to meet the new ammonia limits? Dave Stanford replied that it cannot meet it at the current level of 100,000 gallons per day right now. Todd Dahlberg added that it would be beneficial to determine if the PEL's change if the facility were re-rated to 200,000 gallons per day. This could be compared to the existing quality out of the facility.

It was agreed by the committee that it is unfortunate that know one from the Fairplay Board was present to listen to the discussion and concerns so the community could understand possible alternatives. Also it was agreed that the facility needs to be upgraded but the concerns of the committee are regarding the size and the cost of this new facility. As long as the elected officials and taxpayers know what the cost is going to be, it is not up to this committee to decide how they would like to proceed. The committee also agreed to write a letter from the WQMC to the Fairpaly Sanitation District Board and to the State emphasizing the concerns regarding the size and cost of this project and the impact to rate payers and that they need to meet the effluent standards.

Carl Schueler moved to recommend approval of the Site Application for the Fairplay Sanitation District Wastewater Treatment Plant to the PPACG Board of Directors that the facility needs to meet technical requirements (meeting all of the effluent limits) and also included to the Board will be letters that will be written to the Fairplay Sanitation District Board and the State indicating this committees concern for the current design and size and the cost of the current facility and the impact it will have to the rate payer and to encourage other options for a smaller plant. Mike McCarthy seconded the motion which passed, Jim Schultz opposed and an abstention from Dave Stanford.

9. Jimmy Camp Creek WWTP

Todd Dahlberg gave an update regarding the Jimmy Camp WWT facility and met with all of the treatment facilities south of town regarding this proposed Jimmy Camp Creek WWTP and there is still some possibility on a consolidated plant rather than two separate plants. Talks are still ongoing and further updates and actions will be reported as they take place.

10. PPACG Board of Directors Action Items Report for December 2006

There were no actions taken by the PPACG Board of Directors at the December meeting regarding Water Quality matters.

11. Date of Next Meeting

The next regular meeting will be February 27, 2007 at 1:30 p.m.

12. Other Topics and Announcements

Roger Sams addressed the committee regarding the Security Sanitation Districts Proposal for Modifications to the Water Quality Standards for Copper in Fountain Creek and that hearings will be held in June which may have an impact on the local areas. Roger Sams distributed a handout with further information with the basic purpose regarding these revisions. He encouraged this committee to be a part of reviewing these new standards and submit any comments regarding these new standards.

13. Adjournment – Mike McCarthy moved for adjournment at 3:40 PM.