

DISTRICT OF LILLOOET
WASTEWATER TREATMENT PLANT PROJECT

SUMMARY REPORT

October 21, 2008

Submitted by:

**Grant Loyer, ASCT, CMC
Chief Administrative Officer
District of Lillooet**

INTRODUCTION

This report will submit a brief summary of events from the introduction of a Wastewater Treatment Plant Upgrade Project in 2002 to where the District of Lillooet is at today with the Wastewater Treatment Plant and what actions may take place in the future.

2002

The District of Lillooet contracts with Urban Systems, an engineering consulting firm from Kamloops, B.C., to review existing wastewater treatment infrastructure and propose a preliminary treatment plant design to meet the needs of the sewer specified area. The District had been under some pressure, for a lengthy period of time, to resolve non-compliance issues with the existing Spiragester treatment process.

Urban Systems proposed a sequential batch reactor secondary treatment process. The proposal included site works, preliminary treatment, sequential batch reactors and sludge holding tanks and sludge dewatering. The total estimated cost of the project in November 2002 was \$2,563,000.

During this process, several members of the public accuse the District of not informing the public about the project. Letters are written to the newspaper stating that the project is too expensive, that the timing is wrong to replace the treatment plant, that there are alternatives that should be investigated, that the public was not consulted, that people's fundamental rights were being violated by the approval process and that the counter petition process being followed by the municipality was unfair and not in the best interest of the public.

It should be noted here that the counter petition process is normally used by a municipality to reduce the costs of seeking the ascent of the electorate for funding approval for the project. It is less costly than going to referendum. It is published in the Local Government Act as an accepted method to seeking electorate approval. No rights are violated when this method is used and there is a process available to the public to quash the counter petition process. If the counter petition process fails, the Council has the option to use the referendum process.

It should also be noted that Council has an obligation to inform the public what the project and the petition process is about. The public, however, also has an obligation to read the information supplied. The public has a right to ask questions about the project and to seek information. Public information sessions should be used to answer questions from the public. The public, however, is not responsible for what treatment process is used to meet the specifications put forward by the Ministry of Environment. The process is recommended, in this case, by an engineering consultant, reviewed by staff and approved by Council as part of the overall project. The public's only decision, at the end of the day, is to accept or reject what they are asked to decide on.

In reviewing some of the background information, the impression was that this project was pushed into the political arena to delay it.

November 2002 -2003

Municipal elections took place and a new Mayor and Council are sworn in. The Wastewater Treatment Project had been an issue in the election process and the new Council wanted the scope of the project reviewed before any action takes place. Staff and Urban Systems hold an open house prior to a decision to doing a value engineering assessment. The Council looked for a vehicle to review the project and decided on using a value engineering process. The engineering firm, CH2M Hill was selected to conduct this process for a fee of up to \$40,000.00.

CH2M Hill reviewed the project and stated the following:

1. The original project cost proposed by Urban Systems was estimated at \$2,563,000.00.
2. CH2M Hill estimates that the actual estimated cost of the project, as designed, is \$3,400,000.00.
3. CH2M Hill estimates that they can design a treatment plant project to meet the District's requirements for an estimated cost of \$2,768,632.00.

Treatment plants were visited by members of Council to get an understanding of the type of plant and process that is being recommended by CH2M Hill. Council and staff continued to discuss the Wastewater Treatment Plant Project proposal and CH2M Hill worked on the design and project proposal through 2003.

2004

At a regular Council meeting held on March 01, 2004, Mr. Tom Robinson, P.Eng, CH2M Hill made a presentation to Council on the Wastewater Treatment Plant Project. Council authorized CH2M Hill to purchase two Salsnes Filters at \$101,000.00 each plus applicable taxes and one secondary clarifier at \$162,000.00 plus applicable taxes. It should be noted that Council had not yet approved a construction contract with CH2M Hill. These items were purchased by the District of Lillooet on District purchase orders, not directly by CH2M Hill.

On April 19, 2004, Mayor G. Kamenka and Administrator K. Mellor signed the design/build agreement with CH2M Hill. Council had not passed any resolution to approve the contract until May 03, 2004. The Mayor's and the Administrator's action was discussed at the April 19, 2004 regular Council meeting and direction was given to the Administrator to discuss pricing with CH2M Hill and request the District's solicitor's opinion on the design/build agreement.

At the May 03, 2004 regular meeting, the Council passed a resolution to award the contract for the construction of the Lillooet Sewer Treatment Plant to CH2M Hill. Mayor

Kamenka expressed his concern about the process that has been followed in awarding the contract. This is two weeks after the Mayor and the Administrator had signed the contract and committed the District of Lillooet to a process without Council approval. He makes two points:

1. That staff does not have the expertise in dealing with the project of this size and that an engineer should have been hired as a technical advisor on the project.
2. He was not satisfied with the process and order of awarding the contract, specifically that authorization was given to CH2M Hill to purchase equipment prior to awarding the contract and made reference to the resolution at this meeting to formalize the contract. Mayor Kamenka stated that he wants Council involvement in large projects from now on.

These responses were made two weeks after the Mayor had signed the design/build contract.

On the first point, if staff did not have the expertise to oversee this type of project, it may be a good idea to hire a technical advisor to protect the District's best interests on the project. In a conventional project process the consultant hired by the municipality would fill this role as they have designed the project with municipal oversight and put the project out to tender. Then after reviewing all of the bids from the tender call to ensure that they meet specifications, they make a recommendation to award the tender to the District. The recommendation is brought forward to Council with staff recommendations and Council awards the tender. In the design/build process the consultant in the case of the Lillooet Wastewater Treatment Plant Project was also the general contractor. There was no separate consultant employed by the municipality to oversee the project and protect the District's best interests. The technical advisor position would report to staff and not the Council directly. To ensure impartiality, this person should also not have any affiliation with the design/build contractor, Council or members of staff. There is a policy in the District of Lillooet where all consultants report directly to the CAO or appointed staff, not individual Council members.

On the second point, the Mayor could have made his dissatisfaction known before he signed the design/build contract. Council had not awarded the contract and he made a choice to sign it before Council approved it for award. The Mayor could also have voted against the purchase of equipment approved by Council on March 01, 2004 but did not do so. Members of Council have little expertise in managing construction projects as complex as wastewater treatment plants and should not be involved in detailed planning or oversight. The role of Council in large projects is solely awarding the contract. Staff then report progress to Council. Council should never have any direct responsibility for project construction nor should they get involved in micro managing details. They must maintain their impartial decision making ability.

Project construction was initiated by CH2M Hill and the estimated completion date was December 31, 2004.

2005

On February 8, 2005 the District of Lillooet Administrator signed a letter confirming that February 15, 2005 has been accepted as the contract completion date by the District of Lillooet. The project was, however, not completed at that time. The issue of sludge handling and dewatering had not been resolved and work continued through 2005 to make the purchased equipment work as expected.

2006

In February 2006 I interviewed for the CAO position with the District of Lillooet. Shortly after I was offered the position and agreed to a contract with Council. I was scheduled to start work in Lillooet in April 2006 but started to receive emails and telephone calls in Port McNeill from Tom Robinson of CH2M Hill about the Treatment Plant Project and from Lloyd Stock about the treatment plant and other issues.

On April 06, 2006, in my first week of work in Lillooet, I circulated a report to the Mayor and the Director of Finance on Wastewater Treatment Plant Issues. In it I suggested that CH2M Hill was responsible to resolve the sludge dewatering problem in the manner that they have stated in the documentation. Little did I know that the issue of resolving sludge dewatering was not as clear as I had originally anticipated?

One of my first conversations about the project was with the Public Works Foreman. He had been involved with the original proposal and with the CH2M Hill proposal. He informed me that his preference would have been the first proposal (from Urban Systems) but his opinion was not supported. He also informed me that he had raised concerns about the CH2M Hill project as it was being built but was not listened to. I received information on both projects in three binders from the Public Works Foreman.

At the end of April 2006 I started discussions with the District Solicitor, Chris Murdy, about the District of Lillooet's position in the Wastewater Treatment Plant project. Mr. Murdy's response letter is included in the supporting documentation package. I had sent a box full of information to Mr. Murdy for his review including a response to the bonding company by the previous acting Administrator refusing to release the project bonding as the sludge dewatering issue had not been resolved.

In May 2006 I met with CH2M Hill at their offices in Burnaby and discussed the treatment plant project. I put forward the District's position that the project was not complete due to the sludge dewatering process not performing as it was suggested it should. Negotiations continued after this meeting to August 2006 to try to resolve the sludge dewatering issue to the District's satisfaction. During this period I verbally reported to Council on how these discussions were going. On August 11, 2006 the District solicitor was instructed to communicate our dissatisfaction with the progress of discussions to CH2M Hill. Negotiations seemed to be at a standstill. On August 22, 2006 the District Solicitor received a response from the CH2M Hill lawyers. A meeting

was arranged in Lillooet with CH2M Hill on September 11, 2006. The District Solicitor received a second letter from CH2M Hill on September 06, 2006 discussing the meeting to be held on September 11, 2006 and stating a position that CH2M Hill did not see the need to have legal Council for either party at that meeting. The District Solicitor responded to the CH2M Hill Council letter on September 07, 2006 expressing that the District had issued instructions that he was to attend the meeting on September 11, 2008.

A meeting between the District of Lillooet and CH2M Hill took place on September 11, 2006 in the Council Chambers in Lillooet. Present at the meeting were Mayor C. Roshard, Grant Loyer, CAO and Mr Chris Murdy, Solicitor for the District and Mr Robinson and Mr Nelson of CH2M Hill. Discussions took place around the current situation at the treatment plant and various options to resolve the sludge dewatering issues at the plant. It was a productive meeting and the District received an offer from CH2M Hill on October 02, 2006. The offer was faxed to the District Solicitor for review.

On October 03, 2006 the District Solicitor responded to my request with recommendations on a course of action that could be suitable to the District of Lillooet. This was reported to Council on October 10, 2006. On October 17, 2006 the District responded by letter to the CH2M Hill offer.

On November 03, 2006, Mr Robinson telephoned Mayor Roshard to discuss the Treatment Plant issues. Mayor Roshard and I had discussed the possibility of Mr Robinson contacting Mayor Roshard directly to possibly influence the discussions surrounding sludge dewatering at the treatment plant, their offer and my response letter to their offer. Mayor Roshard responded back to Mr Robinson by email on November 06, 2006 stating that all future discussions take place between CH2M Hill and the CAO, Mr Grant Loyer.

On November 09, 2006 the District received a response from CH2M Hill to our letter and a revised offer with revised pricing on cost issues. The revised cost estimate to install the centrifuge and pay outstanding costs to CH2M Hill was \$199,932.00. A special meeting of Council was held on November 29, 2006 to discuss the offer. The following resolution was approved:

“Moved by Councillor Bontron, seconded by Councillor Parker, “That Council approve the agreement with CH2M Hill with respect to Change Order #2(Rev 1) for improvements at the Wastewater treatment Plant. With the amended date of December 31, 2006, for the sharing of costs of the WAS removal from the plant.”

CARRIED 5/5

From that point, equipment was ordered and the centrifuge was installed in February 2008. Equipment testing took place from February 2008 to July 2008. The District paid the final invoice on July 24, 2008. A supporting document package is available for viewing. Council has released “In Camera” and legal opinion documentation for inclusion in the package.

WHERE DO WE GO FROM HERE

The Director of Public Works has reported that the wastewater treatment plant is currently operating within designated permit levels. He went on to state that while the treatment process is operating perfectly, the District continues to struggle with disposal of sludge. Discussions on the issue of dewatering and disposal of sludge should have taken place and a solution found before construction started on the treatment plant.

The District continues to work towards finding a solution for sludge disposal. The process of dewatering undigested sludge and transporting it to the SLRD landfill creates an odor problem for the landfill operators and at the SLRD's request, the District has discontinued dumping at the landfill and resumed disposal of sludge through a private septic tank disposal company until we can resolve the sludge disposal issue. We continue to discuss the issue with the SLRD staff and the Ministry of Environment.

We are now looking at several solutions including refining the sludge dewatering process and aerobic sludge digestion. Yes, there may be further costs along the way to resolving sludge disposal. Staff will provide progress reports to Council on this issue.

LESSONS LEARNED

1. The first wastewater treatment plant proposal that was presented by Urban Systems would have worked for the District of Lillooet. The proposal included tankage for aerating and holding sludge thickening prior to being pumped to a belt filter press for dewatering. The sequential batch reactor process is operator friendly and if I had to make a choice, based on operator knowledge of both types of treatment plants, I would recommend the plant proposed by Urban Systems.
2. Knowledge of the roles and responsibilities of Council, Staff, Consultant, Contractor and the Public is crucial to understanding how a capital project proceeds. Each body has a role to play in bringing a project to successful completion.
3. If capital projects move into the political arena, the chances of success diminish. Members of Council do not normally have the expertise to move the project forward to a successful conclusion and staff is reluctant to participate due to the increased risk brought forward with Council being directly involved in a project.
4. While design/build proposals definitely have a place in the project construction process, there is a need to have some expertise on staff to oversee the design/build contractor. If that expertise is not available, a more conventional course for project design, management, tendering and construction is the better course.

5. The “Direct Award” process is an option in some instances but the tender process should be the preferred method for receiving bid submissions on capital projects.
6. Contracts must be clearly written and parameters clearly defined. Each party must have a clear understanding what is to be accomplished and what will be delivered before the contract document is signed.

Grant Loyer, ASCT, CMC
Chief Administrative Officer
District of Lillooet