

**CHEROKEE NATION ENVIRONMENTAL PROTECTION COMMISSION**  
**Cherokee Nation Environmental Protection Office**  
**206 E. Allen Road, Tahlequah, OK**  
**Special Meeting**  
**April 20, 2009**

**PRESENT:**

Commissioner: Ed Fite

**CONFERENCE CALL:**

Commissioner: Mark Green

Commissioner: Marty Matlock

**STAFF AND GUESTS:**

Doug Bane, CN Waste Mgt.

Robert Murray, MTG

Turgay Ertugrul, A&M Engineering

Irfan Taner, A&M

Flossie Girty, Cherokee Nation Administration

Dena Geib, CNB

Shawn Slaton, CNE

Tom Elkins, CNEP

Nancy John, CNEP

John Freise, CNEP

Amber Armstrong, CNEP

1. Commissioner Fite called the meeting to order at 9:34 a.m.
2. Commissioner Fite acknowledged and placed into the record the Record of Public Notice and meeting attendance.
3. Commissioner Green made a motion to approve the minutes from the April 7<sup>th</sup> meeting. Commissioner Matlock seconded the motion. The minutes were approved unanimously.
4. Public Comment - No public comments received from the meeting participants.
5. Cherokee Nation Sanitary Landfill

A. Discussion – Alternate Water Sources for Construction Activities

Doug Bane stated that the use of water from the leachate pond for on-going cell construction was being proposed to the EPC. Currently there is surface water in the impoundments that can be used and when that supply is exhausted, alternate water source will be needed. CNWM proposed to utilize approximately 2 million gallons of water from the leachate pond. The level will be measured on a weekly basis and report it to Tom Elkins. The water will be retested after a foot of water has been drawn from the pond. The impoundment will be a good on site source of water for the clay construction and the dust control. CNWM requested approval for this alternate water source.

Tom Elkins stated that Commissioner Green had some issues with the original permit that had been written up and sent out. We changed #3 in the permit conditions to say the water will be tested at 1 foot intervals before the next foot of water column is used. Test results will be submitted to the EPC Administrator as to what is practical but in no case no more than 3

business days after the receipt of the analysis results. Before the next foot of the water column is used, they would have that water tested.

Robert Murray stated that if all of the quality issues are addressed from a testing standpoint on the liquids that are in the basin, there is really not an issue physically. The issue is more regulatory. The process of doing this basically needs to be reclassifying that liquid from “leachate” to water that has been declared suitable for construction.

Tom Elkins stated the quality of the water that is in there is similar to what we would expect for storm water of this region. As long as the analysis of that water is done before use, I don’t see a problem with it.

- B. Approval/Denial Alternate Water Sources for Construction Activities. – Commissioner Matlock made a motion to approve the Alternate Water Sources for Construction Activities and Commissioner Green seconded the motion. The motion to approve the Alternate Water Sources for Construction Activities was approved unanimously.
- C. Discussion – Liner Tie In/ Repair

Commissioner Matlock stated there is obviously a problem with the certification of the liner and its implementation.

Commissioner Matlock presented questions regarding the liner certification and Mr. Ertugrul with A&M Engineering provided the following responses:

Commissioner Matlock: Did you inspect the liner before you certified its application?

Turgay Ertugrul: Yes, we have.

Commissioner Matlock: Did you certify that the liner was installed in a way that met the permit criteria?

Turgay Ertugrul: Yes

Commissioner Matlock: Can you explain why upon subsequent activities we discovered that the liner wasn’t installed as you claimed it was?

Turgay Ertugrul: The problem is that the first phase and the last phase that we designed, was an access road that was passing through providing access to existing landfill operations. The existing road was used for the exterior tie for the phase two. The connection was done going down the slope connecting to the liner. We also provided this information to Cherokee Nation back in 2007. That shows after the landfill was shut down the way that the liner was indicated. The slopes of the landfill were constructed to the one slope and the base was shown that was beyond the liner limits.

Commissioner Matlock: Are you a registered professional engineer?

Turgay Ertugrul: Yes

Commissioner Matlock: Did you certify and stamp the liner design that was ultimately approved by the Cherokee Nation?

Turgay Ertugrul: Right

Commissioner Matlock: Did you certify that the liner had been installed as per your criteria?

Turgay Ertugrul: Yes

Commissioner Matlock: The liner wasn’t installed as per your criteria.

Turgay Ertugrul: The liner was installed based on the actual conditions of the landfill. It was installed based on the certification that we provided.

Commissioner Green: You certified that the liner met the criteria and now we find that it didn’t, so what happened?

Turgay Ertugrul: What didn’t meet the criteria?

Dena Geib stated that they got a call from the construction team whenever they went to expose the tie-in to cell 3 that they are now going to perform. When they exposed the area they found the tie-in cell from 2005 was not welded to the existing cell 3. They thought it possibly went all the way back into the cell. So we got our crews on site and worked with them to expose it to where we found a weld in the liner. Approximately 20 feet of the cell 3 liner is not welded to the tie-in cell from 2005 and there was waste that was placed in this area. The documents that we have show the plat of the liner the way that the pieces are set and welded does not show the existing cell 3 and where the welds are to that cell at all. The certification that was provided by A& M does not mention a variance for a haul road so I brought that up with A&M later. There was a section that was not welded between the 2005 cell and the previous cell in that area so we cannot continue construction in that area. After we exposed it we packed it with clay to make sure that nothing happens in that area now but we will have to make a patch in that area for our current construction.

Commissioner Matlock: Is it your assessment that failure to weld the liner resulted in any damage to the Cherokee Nation that would allow leachate leaking to the substructure of the ground water?

Dena Geib: We checked with our engineers to see if the waste that got underneath those flaps between the two cells was a problem and they have determined that it is a very new portion of the cell. We got lucky in that area that it is very dry and no issues have happened there.

Commissioner Matlock: How much did this cost you?

Dena Geib: We are still determining that because we have to wait until the liner is set for the new cell to make that patch because of all the equipment that comes on site.

Commissioner Matlock: There are significant costs that come along with this particular problem.

Dena Geib: With the exploration and trying to determine, yes there are costs with that.

Commissioner Matlock: I am going to instruct you in the most aggressive way to document those costs explicitly.

Turgay Ertugrul: One thing I want to clear. A&M designed based on the actual conditions of the landfill and we reflect that in our report and certified. The landfill construction operation the cap slope is 4 to 1 slope normally and that is what the permit calls for. In this case the slope in the corner was 2 to 1 slope and it went beyond the liner area so the slope is excessive. The landfill was excessively built with waste that extended beyond the liner limits and I don't think that would be an ends problem as it was designed and constructed with modification to meet that connection.

#### D. Action on Liner Tie In/Repair

Tom Elkins stated that there are opposing ideas of how this came about. I don't have enough in front of me to see what was proposed to have been there in 2005 and 2007. Today, I don't have any recommendation on that. Maybe we can gather more facts if we want to go into that further. I don't know how far Cherokee Nation Waste Management would want to go to it but I think that would be their issue as far as any kind of legal action on this.

Commissioner Matlock recommended the initiation of a process of investigating the failure with the intent of evaluating criminal and civil liabilities in damages. We need to make it clear that we take this seriously and these certifications and these failures are not trivial. We need to make it clear that we will enforce all responsibilities and liabilities to the full extent of our legal rights. The only way to do that is to investigate both criminally and civilly.

Commissioner Green: From our standpoint we have discussed it I don't know that any other action needs to be taken other than try to determine how this happened.

Commissioner Matlock: We want a full investigation. We want to know how it happened. We want to know what happened. We want to know who is culpable and culpability is severe and strict here.

No action was taken. Commissioner Matlock requested a timeline at the next formal meeting for the investigation and deliverables. We need to see at the end of this investigation a full report of findings and recommendation of actions.

6. New Business – There was no new business reported.
7. The next meeting will be June 2, 2009 at 9:30 a.m.
8. Commissioner Green moved to adjourn the meeting. Commissioner Matlock seconded. The meeting was adjourned at 10:30 a.m.