

## **Minutes WTAC 11 October 2019 Meeting**

### **WTAC Members Present**

Terry Mount (Vice-Chair)  
Don Becker  
Dan Boivin

### **WTAC Members Absent**

Andy Schuler (Chair)  
Loren Allen

### **Others in Attendance**

Mia Napolitano (NMED-OGC)  
Chris Vigil (NMED-OGC)  
Michael Broussard (NMED)  
Jason Herman (NMED-GWQB)  
David Bishop (NMED-CPB)  
Deborah Carpenter (NMED-EHB)  
Bill Chavez (NMED)  
Sterling Few (NMED)  
Sara Rhoton (NMED)  
John Ferdetta (Quest 4 Corp)  
Glenn DeGuzman (Bernalillo Co.)  
David Madrid (Bernalillo Co.)  
Mark Comer (MEC Services)  
Ronen Barkan (Fluence Corp.)  
Ron Bohannon (Tierra West)  
Assad Rizvi (Tierra West)

### **Item 1. Roll Call**

Vice-Chair Mount called the meeting to order at 9:34 a.m.

Roll called by Mia Napolitano. All WTAC members present or absent as noted above. Quorum present.

### **Item 2. Approval of Agenda**

Don Becker moved the agenda be approved as published. Dan Boivin seconded the motion. All voted in favor to approve the agenda.

### **Item 3. Approval of the minutes from July 12, 2019 WTAC Meeting**

Dan Boivin noted one correction to the minutes from the last meeting on Page 2, second sentence of last paragraph of Item 4. The sentence "It would not be established as an emergency by the anyone else." should be deleted.

Dan Boivin moved that the minutes be approved, as amended. Mr. Becker seconded. All voted in favor to approve the minutes.

**Item 4. Advanced Treatment Technology Review: Aspiral MABR, model S-1. Presentation by Manufacturer, Fluence Corporation, Application submitted by Tierra West LLC.**

Ron Bohannon of Tierra West gave a brief introduction of the Advanced Treatment Technology that Fluence is presenting for review and approval for use in the State of New Mexico. Ronen Barkan presented Aspiral MABR, model S-1 (“a quick presentation” since all the information was provided in a notebook). Fluence was founded in July 2017. They are a Global Company. They have experience in over 7 countries with offices all around the world. MABR is an acronym for Membrane Aerated Biofilm Reactor. Mr. Barkan presented the process and the highly efficient aeration and biofilm nitrification-denitrification process. “The spirally wound membrane is submerged in a tank with waste water fed continuously, and effluent discharged by overflow. Low-pressure air is blown through one side of the membrane and the biological activity takes place on the other side. Oxygen is constantly supplied to a fixed biofilm that develops on the waste water side of the membrane sleeve. Simultaneous aerobic and anoxic conditions develop in this zone, leading to simultaneous nitrification and denitrification using very little energy and space. This low-pressure, passive aeration uses less energy than conventional aeration. The special conditions in the MABR spiral support a highly efficient nutrient-removal process at low temperatures.”

Michael Broussard went over the Department’s recommendations for this System to be approved. “On August 23, 2019 the Liquid Waste Program Staff completed the review of Fluence Corporation Aspiral SI MABR request for standard status approval as a tertiary treatment unit for all configurations/dimensions, for use in the state of New Mexico.” The Application was submitted on September 1, 2019. Aspiral S1 is a 13,000 gpd unit. The model is manufacturer recommended for flows as low as 5,300 gpd. The packet submitted demonstrates compliance with WTAC PRP 302-E concerning structural requirements for tanks. The packet also addressed cold weather and high elevation as a specific issue with defined actions to be taken by operations and maintenance personnel as called for by WTAC PRP 302G. “Based upon the information reviewed and provided, the LWPS determined that model Aspiral S1 is capable of reducing total nitrogen by an average of 84%.” “Therefore, upon review of the information provided by Tierra West LLC on behalf of Fluence Corporation, the LWPS requests that the WTAC recommend approval by the NMED Secretary that this product Aspiral S1 and like models be approved for use in the state of New Mexico under standard status as a tertiary treatment unit with an approved treatment level not less than 12.0mg/L.”

Questions and answers: Mr. Boivin asked if “the minimum flow recommended is in fact 5,300 gpd?” Fluence indicated that this is a 13,000 gpd but their submitted data indicated that the unit can treat as low as 5,300 gpd. Mr. Boivin points out that he is not sure if it is appropriate for the WTAC to make a recommendation to the Secretary because a unit that treats above 5,000 gpd is outside of the WTAC’s purview.

Mr. Boivin asked what Fluence's intent was today. Fluence's intent was to put one system on with a follow up in Carlsbad, NM at a man-camp. The design flow there would be less than 5,000.

Vice-Chair Mount asked if they are looking at having holding tanks or equalization tanks in front of these or if they were looking at it being a straight build-up? The next presentation will cover this question. Basically, an equalization tank will be ahead of the MABR System.

Mr. Boivin asked if there were scaling requirements. Mr. Broussard confirmed that the requirements are 1-5 scaling.

Questions open to the public:

Several members of the public had questions and comments about the newer technology, ensuring an operator is available for the system, and how this system would be used at these man-camps.

Mr. Becker asked who is going to maintain this. Mr. Bohannon answered a trained operator will maintain this (certification of the trained operator will be sent to NMED). Mr. Becker is concerned about maintaining an operator for the system. Mr. Chavez says they would make it a permit condition that they have a licensed operator on staff all the time.

Mr. Boivin thinks technically they can only approve down to only 2,600 gpd. They will have to give data on a smaller unit. Mr. Boivin motioned to approve and present to the Secretary this system as recommended by staff with stipulation that they can only approve down to only 2,600 gpd (1/5 of what they ran their test). Mr. Becker second the motion. All approved.

**Item 5. Treated Wastewater Re-use-Surface Discharge-presentation by the Department concerning regulatory limitations of surface discharge or treated effluent. Proposal by Tierra West LLC to re-use treated effluent as irrigation or dust control. The Department seeks the WTAC's comments. Pending application submitted by Tierra West LLC.**

Mr. Bohannon presented the surface discharge portion of the same man camp. He handed out a system layout. He said they will actually take their collection system and run that through the Construction Industries Division ("CID"). Through CID they have collection lines that will run down similar to an RV park where you have a sewer connection as well as a water hook up. It will be collected down into an EQ Tank. They originally had a coarse filter set up on it but after working with Fluence they eliminated it. That is some of the operational issues that were mentioned today.

Mr. Broussard said: "This was a later discussion in that they are proposing to do some land applications for dust control. Tierra West LLC's proposal was asking if the NMED would consider allowing land application. They submitted a variance application hoping to do that. Mr. Boivin

asked: “The variance is required because for a normal on-site system under 2,500 gpd you don’t let them do this?” Affirmative by Mr. Broussard. The Department is just looking for feedback from WTAC.

“Monsters” referred to by Mr. Broussard are: there are proposals using other waste water streams for dust control. Corrected by Mr. Comer, not waste water but processed water. It has created a wrinkle where the Department will have to have a discussion to ensure people understand that if they are going to create a porting line between and which type of waters are going to be used and they need to be clear on that. The Cabinet Secretary has asked the Department to give this a little more thought and discussion and go through him before they approve land applications.

GWQB spoke to the issue of containments in the reused water. There is an additional amount of testing that needs to be done to ensure that they are not applying any water to wells of any containments. Mr. Boivon pointed out when you get to smaller systems you get greater variability and less monitoring. The Department must take this into consideration. Mr. Broussard is asking for comments and suggestions before starting this up so as to start correctly and not have to worry about fixing or redoing if not started properly.

Identification of 2<sup>nd</sup> disposal sites were addressed. They anticipate being up and running in about 120 days (at the longest).

**Item 6. Proposed Fee Changes: NMED seeks the WTAC’s comments concerning the proposed fee changes.**

Mr. Broussard said one of the key issues was to define small systems being up to 2k gpd and larger systems being 2-5k gpd.

NMED is going to propose an application fee for all septic pumping trucks and require that they be registered with NMED.

NMED will also propose a fee for annual operating permits. For ATS, ADS, Commercial Water Systems and for holding tanks there will be a fee for annual operating permits. They will have to register with the Department and pay a fee annually.

NMED is proposing that these fees are consistent with the Consumer Market Index. These fees are going to increase in increments on an annual basis. Each year a new fee schedule will have to be published.

Public meetings regarding the proposed fees will be held at the end of October and will continue until December

**Item 7. Surface Irrigation Policy: NMED seeks the WTAC's comments and advice concerning the policy of a variance for commercial systems greater than 2,000 gpd for surface irrigation IAW the policy.**

This was discussed and tied together with Item 5 on page 5.

**Item 8. Tire Chip Approval. NMED seeks the WTAC's comments and advice concerning the approval of tire chips as an alternative disposal field media.**

Michael Broussard discussed the draft statement of approval. Mr. Boivon's concern is "structural". They clarified "non-woven" #3 on the last page was not referring to the actual tire-chips but the "continuous layer of non-woven **filter fabric**."

**Item 9. Other business**

No other business.

**Item 10. Next meeting agenda and date**

December 20, 2019 at 9:30 a.m. in Albuquerque.

**Item 11. Adjournment**

Mr. Becker moved that the meeting be adjourned. Mr. Boivin seconded the motion. All voted in favor. The meeting was adjourned at 11:39 a.m.

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Prepared by Denise Chavez  
Paralegal for NMED's Office of General Counsel

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Date Approved by WTAC