Annette Caraway called the meeting to order at 1:05 PM

   - Enforcement unable to attend.
   - DFA Deputy Director Joe Karkoski unable to attend.

2. Agenda Review – Annette announced that no action will be taken at this meeting due to vacant spots on the Advisory Committee currently and consequently a lack of quorum.

3. Public Comments – Legally defined by Julie Osborn, comments by public, ex members of advisory committee, or anything regarding things not on the agenda.
   - Advanced Water Treatment education and certification discussion regarding the future. Steven Garner, PMP, CAE – announced the status of AWWA/CWEA’s Advanced Water Treatment – 66 Grade 111 operators – 15 Grade IV operators – 8 Grade V operators – separate certification from the state. Steve Krai asked will state require a certification for AWT? Will there be exam prep classes at sac state? Steven says it is a likelihood as historical events had led to current requirements per Joe. (70’s & 90’s) Annette stated she is not in communication with anyone about certification and so there are no classes offered that are in any way associated with the state. Steven stated CSU Sacramento has some classes being offered and some are being melded into the wastewater manual. How do we address the ongoing need to prepare for position and for the certification, and how many hours should be required under the certification and renewal? Number of selected entities providing piece parts of it. It is an emerging market and is still information.
   - Annette asked out of each grade how many are DW certified vs. WW certified? Steven Garner replied that they do not have that info and don’t have other demographic info. Future meeting to be placed for further discussion on this.
   - Ramzi Mahmood stated that CSUS plans to create training book, which is 1 of 19 other books. Optimistically will be completed in 3 years.
   - Neal announced that advisory committee member Michael Melady is retiring and thanked for his time serving on the Advisory committee.

4. Enforcement Update – Enforcement unable to attend Advisory Meeting, No Update.

5. Wastewater Operator Certification Program Update
   - Neal welcomed Sarah Miller as the new SSA in the WWOCP. And the that the program is busy processing applications.
Steve Krai asked if Program plans to continue with Computer Based Testing (CBT)? Annette replied yes. Jeff Carson brought up feedback he’s received from examinees regarding Earphones not being clear, some had to rip out cords, and some examinees were distracted with keyboard strokes. But overall, there’s been a positive acceptance of CBT from operators. The turn around time helps a lot. CBT sometimes involves groups of nurses testing and the loud keyboard strokes can be distracting. Operators are seeking training opportunities as there was some content that was new to operators. There is concern that the content has changed. Jody Hack replied that content has not changed but the form of the questions has, and it has been broken into steps. The result should be the same. Neal & Annette stated that the Training directory is currently on the WWOCP website and was last updated in 2019. It will be placed on the priority list of items/documents to update. Regarding other concerns, they will be mentioned to the 3rd party vendor, but some things are out of Office of Operator Certification’s control.

6. Examination Update

Neal – Presented a data regarding Wastewater examinees historical pass rate vs new CBT average passing rates. He also presented CBT statistics.

<table>
<thead>
<tr>
<th></th>
<th>2018 SPRING/FALL</th>
<th>2019 SPRING/FALL</th>
<th>2021 CBT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRADE I</strong></td>
<td>67.45% / 69.44%</td>
<td>70% / 50.95%</td>
<td>57%</td>
</tr>
<tr>
<td><strong>GRADE II</strong></td>
<td>51.24% / 63.78%</td>
<td>66.36% / 41.59%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>GRADE III</strong></td>
<td>54.67% / 56.80%</td>
<td>45.59% / 35.26%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>GRADE IV</strong></td>
<td>46.99% / 23.08%</td>
<td>25% / 22.45%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>GRADE V</strong></td>
<td>55.86% / 65.82%</td>
<td>45.9% / 26.1%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**COMPUTER BASED TESTING (CBT) PASS PERCENTAGE FROM INCEPTION**

Wastewater Operator Certification Examinations Grades I-V
Timeframe: February 20, 2021 – November 30, 2021

**Grade I Examinations:**

- Total Examinees: 360
- Pass Count: 207
- Fail Count: 153
- Passing Percentage: 57%

**Grade II Examinations:**

- Total Examinees: 378
- Pass Count: 208
- Fail Count: 170
- Passing Percentage: 55%
Grade III Examinations:
- Total Examinees: 297
- Pass Count: 74
- Fail Count: 224
- Passing Percentage: 25%

Grade IV Examinations:
- Total Examinees: 92
- Pass Count: 19
- Fail Count: 73
- Passing Percentage: 21%

Grade V Examinations:
- Total Examinees: 146
- Pass Count: 34
- Fail Count: 112
- Passing Percentage: 23%

Grades I and II CBT passing rates are similar to the paper exam passing rates. Grades III – V CBT passing rates are lower than the historical paper exam passing rates due to partial credit no longer being given on math and essay questions.

Steve and Ramzi asked if there are specific questions people are missing. Neal replied that the program does not have that data as of yet, but possibly may in the future. Additionally, actual point scores for passing exams are not kept, only that the examinee passed the exam. Steve Krai asked for those exams that have lower passing rates, do you guys plan on bringing them up?

Annette replied that CBT started in February and the State usually waits a year for data/info to make any changes.

Steve stated the goal of a test is to be sure to have competent operators and we may be giving a test that is too hard. There have been a lot of retirements and a lot of new hires. They want to get them in.

Kody Tompkins stated we want to have operators that are knowledgeable in the work force and it is a fine line regarding having them study a test and pass an exam.

Monte Hamamoto Stated knowing the questions that are troubling and subject would be important. I can help notify the operators what it is that they need to sturdy and learn.

7. Delay in appointing new members

Advisory committee members – Appointees – Nominate people if you know someone who would be a good fit. We have 5 vacant slots and we would appreciate nominations possibly new hires so that they can stay awhile.

8. Schedule Next Advisory Committee Meeting
The following Advisory Committee Meeting was scheduled for June 8, 2022.