



BACWA PRE-PARDEE TECHNICAL SEMINAR PROGRAM
 Friday, September 21, 2018
 9:00 am to 3:00 pm
 EBMUD, 2nd Floor Large Training Room
 375 11th Street, Oakland, CA

| <u>Agenda Item</u> | <u>Time</u> | <u>Pages</u> |
|--|-----------------|--------------|
| 1 ROLL CALL AND INTRODUCTIONS | 9:00 AM | |
| 2 PUBLIC COMMENT | 9:02 AM | |
| 3 <u>Administrative Issues</u> a. Review of Classes of Membership and Fees b. Summary of Board Policies and Staff Procedures | 9:03 AM | 2 |
| 4 <u>1st Watershed Permit Status</u> a. Review of Permit Requirements b. Group Annual Report Group Annual Report c. Debrief on Workshop with Water Board staff d. Optimization/Upgrade Project Brochure e. Briefing to the Water Board Members | 9:20 AM | |
| 5 <u>Chlorine Residual Basin Plan Amendment</u> a. Desired Outcome b. Progress on Scope of Work c. Strategize on Options for Reporting Level | 9:55 AM | |
| 6 <u>Air Issues</u> a. Review of Case Studies for the Jt Meeting with WB/BAAQMD b. Other AIR updates i. Pilot Study Permitting ii. Discussion for Streamlining ATCs iii. Clean Air Plan iv. Update on Rule 11-18 v. Particulate Matter Regulation 6, Rule 1 vi. Organic Waste Diversion vii. BAAQMD Technology Implementation Office c. Strategy Development for Future Interaction with BAAQMD on Key Issues | 10:15 AM | 3-6 |
| LUNCH BREAK | 12:00 PM | |
| 7 <u>2nd Watershed Permit Status</u> RMP Update 2018 a. Review of Nutrient Surcharge b. Approach for the Regional Study c. Review of Draft Permit Language on Review Study d. Approach for Load Caps and Incentivizing Early Actions e. Review of Darft Permit Language for Load Caps and Incentivization | 12:30 PM | |
| 8 <u>Water Board and SFEI join the meeting</u> a. Joint review of draft Permit language | 1:30 PM | |
| 9 <u>Finalize Pardee Technical Seminar Agenda</u> | 2:45 PM | |
| 10 ADJOURN | 3:00 PM | |

SUMMARY OF PROPOSED BOARD POLICIES

ADMINISTRATIVE POLICIES

Succession Planning
BACWA Representation Policies
Committees
Conflict of Interest
Emerging Technology
Website Policies
Travel Policies
Document Retention Policy

FINANCIAL POLICIES

Investment Policy
Contracting Policy
Class of Membership Policy
Reserve Policy

City of Petaluma

Issues for Bay Area Air Quality Management District

1. Lengthy Timeline required to obtain Authority to Construct (ATC) Permits

- a. The review process is cumbersome
 - City's ATC took nearly 10-months to process.
 - Air Board claims that an Accelerated ATC will be acted on within 35 working days, if the application is complete.
 - The Air District made multiple requests for additional information throughout the review, including requests for documents submitted previously. It was unclear when the application was considered "complete".
 - The Air District determined that additional fees were due after reviewing some of the documentation. Review was delayed until the additional fees were submitted.
- b. Information required for the ATC is not available until after a construction contract is awarded
 - Due to public contract bidding requirements, the specific equipment to be used in a project and the associated emissions data needed for the ATC is not available to the wastewater agency until after the construction contract has been awarded.
 - While the equipment is specified in the bid documents, the actual equipment to be used is selected by the contractor and the emissions data is provided in the submittal process.
 - Depending upon the complexity of the project, submittals may take weeks to months.
 - The City was able to expedite the submittal for the boiler equipment and emissions data was received within one week of Notice to Proceed.
 - The specific emissions data for equipment should not be needed until agency submits application for Permit to Operate.

2. No mechanism to allow temporary shutdown of abatement devices during construction.

- a. Permit to Operate condition requires abatement of digester gas "at all times".
- b. There are no variances or exceptions for minor emissions during construction.
- c. The ATC focuses on the equipment being installed and the associated emissions and abatement devices but has no information or requirements for construction activities.
 - Construction in an existing facility requires tie-ins to active equipment. The ATC has no provision to remove an abatement device from service for short durations.
 - Applying for variance in advance is not feasible, because it is not possible to predict the exact timing of construction tie-ins.
 - Installing a temporary abatement device requires permit from the Air Board and a significant cost for equipment rental and mobilization.

3. No mechanism to allow for minor emissions during maintenance and repair activities or ongoing operations.

- a. While repair and maintenance activities do not require an ATC, the Permit to Operate requires digester gas abatement at all times.
- b. There are no variances or exceptions for minor emissions during maintenance and repair activities. These activities are typically of short duration and may arise unexpectedly.
- c. It is not feasible to expect agencies to have standby equipment available for all instances where an abatement device must be isolated for short durations.
- d. There is an allowance for maintenance, replacement and addition of fugitive components (valves, flanges, pumps, etc.) of up to 10 lb/day, but this is limited to refineries and chemical plants.

4. Lack of effective communication between inspectors in the field and office staff.

- a. When City notified inspector of intent to remove abatement device from service for up to 2 hours for a construction tie-in, the inspector believed that there was some type of variance or exemption. Instead, City was issued a violation.
- b. When City notified inspector of intent to conduct testing on an acid phase digester, and that there might be H₂S emissions above the permit limit during this time, inspector did not inform City of process for obtaining Temporary Operating Permit. City was issued a violation.

Additional Details

ATC Timeline

- The timeline required to obtain Authority to Construct permits is challenging because of when emissions data required for the permit application becomes available in a publicly bid construction project. As an example, the City of Petaluma recently constructed a second anaerobic digester at the Ellis Creek Water Recycling plant. Included in this was a second process heating boiler that uses digester gas as fuel. The information required to obtain the Authority to Construct included the emissions data from the boiler. Typically, this information will not be obtained by the applicant until after a construction contract is executed, a subcontract with the boiler supplier is executed, and a submittal is received. This can be several months into a construction project. The City of Petaluma was fortunate to obtain this information early in the process, getting it on the typical timeline would have delayed the project. To highlight the challenges the timeline experienced on the Ellis Creek Solids Handling Upgrade project was as follows:
 - Aug 29, 2016 – Notice to Proceed issued to Contractor
 - Sep 7, 2016 – Boiler emissions data received from the sub-contractor/supplier.
 - Sep 20, 2016 - Initial Authority to Construct Permit submitted
 - Oct 19, 2016 - City Checked on status of application
 - Oct 20, 2016 - Initial response received from BAAQMD. Additional information requested with several items that require information from equipment submittals.

- Nov 17, 2016 – City responded to BAAQMD with additional requested information, including information from equipment submittals received on Nov 16, 2016.
- Dec 13, 2016 – Check for permit application sent
- Dec 15, 2016 - City Checked on status of application
- Jan 10, 2017 – BAAQMD responded, risk screen required on boiler additional fees required.
- Jan 11, 2017 – BAAQMD requested additional information, City responded with additional information. 2 of 4 items were already provided in previous submissions.
- Jan 26, 2017 – Check for additional fees sent
- Mar 2, 2017 - City Checked on status of application
- Apr 3, 2017 - City Checked on status of application
- Apr 10, 2017 – Response received that details on permit would be provided by end of the week.
- Apr 14, 2017 – Update on permit provided, risk screening completed for boiler and digester
- Apr 17, 2017 – Additional questions from BAAQMD, 2 of the 4 items were answered previously
- May 1, 2017 – City provided answers to additional questions.
- May 2, 2017 – Additional questions asked
- May 4, 2017 - City responded to questions and requested phone call to facilitate resolution.
- May 24, 2017 - City Checked on status of application
- Jun 2, 2017 – Response received, expecting permit to be issued in coming weeks.
- Jun 22, 2017 - City Checked on status of application
- June 28, 2017 – Response received that permit was approved and should go out that week
- July 14, 2017 – Authority to Construct was issued.

This was nearly a 10-month process to obtain the Authority to Construct. This is advertised, if the application is complete, to be a 30-day process. Although the project was delayed because of other issues, if the project had stayed on the original construction schedule, this timeline to obtain the permit would've delayed the project. From talking with counterparts in other municipalities this is typical of what is experienced in similar publicly bid construction projects.

Construction tie-ins.

The City of Petaluma was issued a Notice of Violation by the BAAQMD for failure to abate digester gas at all times. The City was in the midst of a treatment plant improvement project that includes construction of a second anaerobic digester. The City isolated our abatement devices so that a valve could be installed as a part of the capital improvement project. Isolating the digester resulted in a pressure relief valve periodically venting for a period of less than two hours. City Staff notified the BAAQMD Inspector prior to work and was told there were likely exceptions in the regulations that might allow this type of work to be performed without violating permit requirements. The City reached out to the BAAQMD prior to the shutdown with the intent to ensure compliance with air permits. The BAAQMD did not provide clear direction, and the initial direction received from the Air Board implied this activity might fall under an exception.

It was only after the shutdown had occurred that City staff were informed the Air Board expected the City to apply for a variance months in advance of the shutdown, and that there were no exceptions or variances for construction activity even though the Air Board had previously reviewed and approved the project. It is the City's contention that applying for a variance months ahead of time was not reasonable as construction schedules routinely change, delaying a project at a wastewater treatment facility for months is costly, and may negatively impact the environment and public health.

To have complied with Air Board requirements for a temporary abatement device for this brief episode could have cost substantial funds to the City. The City of San Jose spent over \$1 million on temporary abatement/permitting during a project. Any temporary abatement device needs to receive approval from the Air Board, and the inspector said they expect applications had to be submitted 3-18 months in advance of the work being done. The cost could have been \$200k or more when you consider equipment, permitting, and project delays.