ALAMEDA COUNTY WATER DISTRICT

43885 So. Grimmer Boulevard
Fremont, CA  94538

OPERATIONS & WATER QUALITY COMMITTEE

AGENDA

Wednesday, July 1, 2020

4:15 p.m.

ACCESSIBLE PUBLIC MEETINGS: Upon request, ACWD will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request at least 72 hours before the meeting to the District Secretary, ACWD, 43885 S. Grimmer Blvd., Fremont, CA 94538, or to gina.markou@acwd.com stating your name, mailing address, phone number, and brief description of the requested materials and preferred alternative format or auxiliary aid or service.

MEMBERS OF THE PUBLIC MAY PARTICIPATE IN THIS MEETING VIA WEBINAR https://us02web.zoom.us/j/82466043463 OR BY CALLING ANY OF THE FOLLOWING PHONE NUMBERS: 1-669-900-9128 or 1-346-248-7799 or 1-301-715-8592 FOLLOWED BY 824 6604 3463.

MEMBERS OF THE PUBLIC MAY NOT ATTEND THIS MEETING IN PERSON. DUE TO THE COVID-19 PANDEMIC AND IN ACCORDANCE WITH GOVERNOR NEWSOM'S EXECUTIVE ORDER N-25-20 WHICH SUSPENDS PORTIONS OF THE BROWN ACT, THIS MEETING WILL BE CONDUCTED BY WEBINAR/TELECONFERENCE ONLY.

1. Update on District’s California Accidental Release Prevention (CalARP) Program
   Presenter: Thomas Spankowski

2. Proposed Security Services Agreement
   Presenter: Kurt Arends

3. Update on Voluntary PFAS Monitoring
   Presenter: Mike Wickham

4. Public Comments

6/26/2020
Update on District’s California Accidental Release Prevention (CalARP) Program

Thomas Spankowski
Objectives

- Purpose of CalARP
- Administering Agency
- ACWD CalARP Programs
- Program Update
Purpose of CalARP

California Accidental Release Prevention Program

- Prevent accidental chemical releases
  - Focus on chemicals of greatest risk to public and environment
- Minimize the possibility and/or mitigate the effects of an accidental release
- Document personnel are safely operating and maintaining a process that uses a regulated substance
- Ensure facilities are dedicating resources needed to prevent accidental releases
  - Training
  - Equipment and Maintenance
  - Personnel
CalARP Regulated Substance

- Each facility with a regulated substance, in excess of the threshold quantity, in a process, is mandated to implement the CalARP Program.

- ACWD regulated substance is aqua ammonia (AA).

- Three ACWD facilities have aqua ammonia (AA) inventories in excess of 500 lbs.
  - BF
  - NDF
  - WTP2

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Also on Table 4</th>
<th>CAS Number</th>
<th>State Threshold Quantity (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone Cyano hydrin</td>
<td>no</td>
<td>75-86-5</td>
<td>1,000</td>
</tr>
<tr>
<td>Acetone Thiosemicarbazide</td>
<td>no</td>
<td>1752-30-3</td>
<td>1,000/10,000</td>
</tr>
<tr>
<td>Acrolein</td>
<td>yes</td>
<td>107-02-8</td>
<td>500</td>
</tr>
<tr>
<td>Acrylamide</td>
<td>no</td>
<td>79-06-1</td>
<td>1,000/10,000</td>
</tr>
<tr>
<td>Acrylonitrile</td>
<td>yes</td>
<td>107-13-1</td>
<td>10,000</td>
</tr>
<tr>
<td>Acrylyl Chloride</td>
<td>yes</td>
<td>814-68-6</td>
<td>100</td>
</tr>
<tr>
<td>Aldicarb</td>
<td>no</td>
<td>116-06-3</td>
<td>100/10,000</td>
</tr>
<tr>
<td>Aldrin</td>
<td>no</td>
<td>309-00-2</td>
<td>500/10,000</td>
</tr>
<tr>
<td>Allyl Alcohol</td>
<td>yes</td>
<td>107-18-6</td>
<td>1,000</td>
</tr>
<tr>
<td>Allylamine</td>
<td>yes</td>
<td>107-11-9</td>
<td>500</td>
</tr>
<tr>
<td>Aluminium Phosphide</td>
<td>no</td>
<td>20859-73-8</td>
<td>500</td>
</tr>
<tr>
<td>Aminopterin</td>
<td>no</td>
<td>54-62-6</td>
<td>500/10,000</td>
</tr>
<tr>
<td>Ammonia Oxalate</td>
<td>no</td>
<td>3734-97-2</td>
<td>100/10,000</td>
</tr>
<tr>
<td>Ammonia $^5$</td>
<td>yes</td>
<td>7664-11-7</td>
<td>500</td>
</tr>
</tbody>
</table>

The listing of ammonia includes anhydrous and aqueous forms of ammonia pursuant to Section 5552(g)(2).
Administering Agency

- Local agency responsible to implement the CalARP program
  - This responsibility falls to a Certified Unified Program Agency (CUPA)

- ACWD facilities with covered process fall within two CUPA territories
  - WTP 2 and BF’s CUPA is Fremont Fire Dept. (FFD)
  - NDF’s CUPA is Alameda County Department of Environmental Health (ACDEH)
CalARP Program Levels

WTP2 is a Program 1 process
- No accidental release of a regulated substance within the past 5 years resulting in death, injury, or significant environmental damage.
- No offsite public areas within the worst-case toxic end point.
- Previously a Program 2

NDF and BF are Program 2 processes
- No accidental release of a regulated substance
- Has offsite public areas within the worst-case toxic end point
CalARP Program Requirements

WTP2 is subject to CalARP Program 1 requirements
- Hazard Assessment with a worst-case analysis
- Document nearest public receptor is beyond the distance to a toxic endpoint
- Maintain 5-year accident history
- Coordinate with local emergency responders

NDF, and BF are subject to CalARP Program 2 requirements
- Includes Program 1 requirements
- Document CalARP Management System
- Prevention Program elements
Hazard Assessment Elements

Offsite Consequence Analysis (OCA)
- Worst-Case AA Release Scenario
  - Full tank instantaneously fails into secondary containment
  - Active forms of protection not working (scrubbers)
  - Wind-speed, temperature, and humidity is just right
  - Variables: tank size, containment area, distance to property line
- Using modeling software, establishes toxic endpoint based on Worst-Case AA Release Scenario
  - Area of concern shows furthest point that a release of AA would affect

Alternative Release Scenario
- Transfer hose failure
WTP2 Hazard Assessment 2015

- 2015 updated Offsite Consequence Analysis found under a worst-case AA release scenario **no public receptors** were within the area of concern
- WTP2 was reduced from a Program 2 to Program 1
- A 2020 update is planned, and will include current development
Predicted outcome of 2020 WTP2 Hazard Assessment

- Using a current (3/2018) google map, the 2015 toxic endpoint radius was used to show the expected area of concern for the upcoming 2020 Hazard Assessment

- 2020 Hazard Assessment is expected to show no public receptors within area of concern.
BF Hazard Assessment 2015

- 2015 updated Offsite Consequence Analysis found under a worst-case AA release scenario a population of 785 were within the area of concern
- Due to the population within the area of concern the BF is Program 2
- A 2020 update is planned
NDF Hazard Assessment 2015

- 2015 updated Offsite Consequence Analysis found under a worst-case AA release scenario no public receptors were within the area of concern
- ACWD requested that NDF be reduced to Program 1 which ACEHD denied due to concerns with unidentified receptors in the area of concern
- A 2020/21 update is planned
CalARP Workbooks

- Document the CalARP program for each facility
- Workbooks are kept at the operator console area
  - BF
  - NDF
  - WTP2
Prevention Program

- Safety Information
- Incident Investigation
- Hazard Review
- Operating Procedures
- Compliance Audits
- Maintenance
- Training
Program Updates & Compliance

2019
- Annual Review and Certification
- Team: CalARP coordinator and management team
- Triennial compliance audit #3
- Team: consultant, ECU, WPD, and FMD

2020
- Annual Review and Certification
- Team: CalARP coordinator and management team
- 5-year program update #2
- Team: consultant, ECU, WPD, and FMD

2021
- Annual Review and Certification
- Team: CalARP coordinator and management team

2022
- Annual Review and Certification
- Team: CalARP coordinator and management team
- Triennial compliance audit #3
- Team: consultant, ECU, WPD, and FMD
The CalARP Program workbooks are “living” documents. Deficiencies will occur, procedures will change. The idea is to update and follow-up in order to demonstrate you are following the prevention program.
Questions?