

Semi-Annual Water Quality Report

Planning Committee
October 13, 2015

District's Water Quality Goals



- Meet Federal and State Drinking Water Standards
 - KPI – Meet 100% of Federal and State Drinking Water Standards
 - Met all Federal and State Standards
- Strive to meet the District's Water Quality Goals
 - KPI – Meet 100% of District's Water Quality Goals
 - 2015 met 96% of Water Quality Goals

Disinfection By-Products



- TTHM
 - Exceeded WQG in 5 of 32 compliance calculations (16%)
 - Source water quality, drought operations and supplemental supply
- HAA5
 - Exceeded WQG in 1 of 32 samples (3%)
 - Source water quality, drought operations and supplemental supply

Total Coliform and Chlorate



- Total Coliform
 - WQG 0.5% positive
 - Exceeded WQG in March (2/353) and April (3/356)
 - All repeat samples were negative
- Chlorate
 - WQG: 400 $\mu\text{g/L}$
 - Exceeded in 1 of 14 samples
 - Manage inventory to reduce storage time

Taste and Smell



- Taste & Smell Complaints
 - WQG 30 or less Consumer Complaints per Month
 - March; 75 complaints
 - Pardee gate change
 - June; 67 complaints
 - San Pablo Reservoir algal bloom
 - Taste & Smell compounds (MIB and geosmin) not toxic

Fluoridation



- US Health and Human Services
 - May 2015
 - Optimal fluoride dose: 0.7 mg/L
- District decision to reduce optimal dose
- All plants lowered to 0.7 - 0.75 mg/L
 - 6 water treatment plants
 - Different source water quality
 - Calculated dose (WTP) versus measured concentration (Dist System)

Fluoridation (cont.)



- January to August 2015
 - 0.34 to 0.93 mg/L
 - Average 0.82 mg/L
- September 2015
 - 0.62 to 0.88 mg/L
 - Average 0.72 mg/L

Lead/Copper Rule (LCR)



- National Drinking Water Advisory Committee (NDWAC)
- Potential changes to LCR
 - Copper
 - Lead service lines
 - Local health authorities

Cyanotoxins

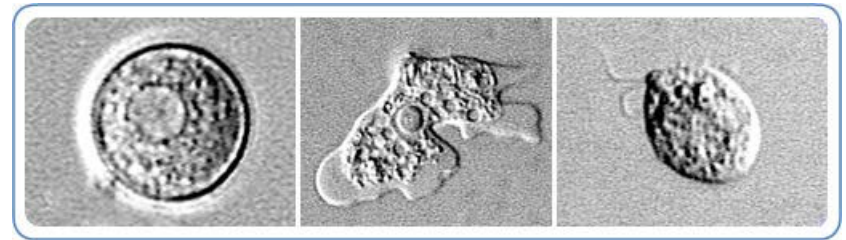


- USEPA 10-day Health Advisories
 - Microcystins
 - Cylindrospermopsin
- Two advisory levels
 - Six years and younger
 - Over six
- District Monitoring and Response Plan

Cyanotoxin	10-day Health Advisory \leq six years old ($\mu\text{g/L}$)	10-day Health Advisory $>$ six years old ($\mu\text{g/L}$)
Microcystins	0.3	1.6
Cylindrospermopsin	0.7	3

Naegleria fowleri

- Etiologic agent for primary amoebic meningoencephalitis (PAM)
- Enters through nasal passage
 - Diving into warm recreational water
 - Neti pot
 - Abulation
- CDC guidelines for the preparation of water



From: CDC Website

Naegleria (cont.)



- AWWA workshop on distribution system disinfection issues
 - SWTR detectable residual
 - *N. fowleri* found in drinking water distribution systems in southeast
 - Maintain disinfectant residual
 - No reported cases in District's service area

Legionnaire's Disease



- 1989 Surface Water Treatment Rule
- Institutional plumbing issue
 - Medical campus
 - College campus
 - High tech campus (Google, Apple, ...)
 - Prisons
 - High rise office buildings
- No reported cases in District service area

Questions



- Thank you for your attention.
- Questions

Semi-Annual Regulatory Compliance Update

Planning Committee

October 13, 2015

Agenda



- FY15 enforcement actions
- Glen Echo Creek cellular concrete spill
- Cal/OSHA activities
- Safety program results
- Upcoming Activities

Enforcement Review



- Strategic Plan KPI = Zero NPDES and Waste Discharge Requirement (WDR) permit Notices of Violation (NOVs) received
- FY15 – 6 NOVs

Notices of Violation



- August 2014 missed sample at Clay Station RWPP
 - New Compliance Calendar system
- August 2014 no sample at CANS WTP
 - No flow to sample
- February 2015 discharge from FSCC pipeline exceeded settleable solids and TSS
 - Did not reach receiving waters

Notices of Violation (cont)



- March 2015 missed samples at CANS WTP
 - No discharges occurring
- June 2015 unreported flow volume at CASS WTP
 - Reporting error
- June 2015 chlorine residual at Pardee WTP
 - Did not reach receiving waters

Glen Echo Creek Summary



- Wednesday, April 8, at approximately 11:30am
- Dingee pipeline replacement project
- Estimated 170 cubic yards of cellular concrete
- Rockridge Branch of Glen Echo Creek in Oakland Hills
- Spill extended approximately one mile
- Series of culverts & open creek



4/12/2015
72.5 FT

Cam Dir: Downstream







Root Cause Findings



- Drawings are not 100% accurate
- Visual and physical inspections of buried valves are inadequate
- Developed a physical integrity test or inspection via CCTV

Next Steps



- Continue water quality monitoring
- Finalize restoration plan
- Obtain permits
- Implement restoration plan
- Enforcement/Fine negotiation with SWRCB, RWQCB, and CDFW

Cal/OSHA Investigations



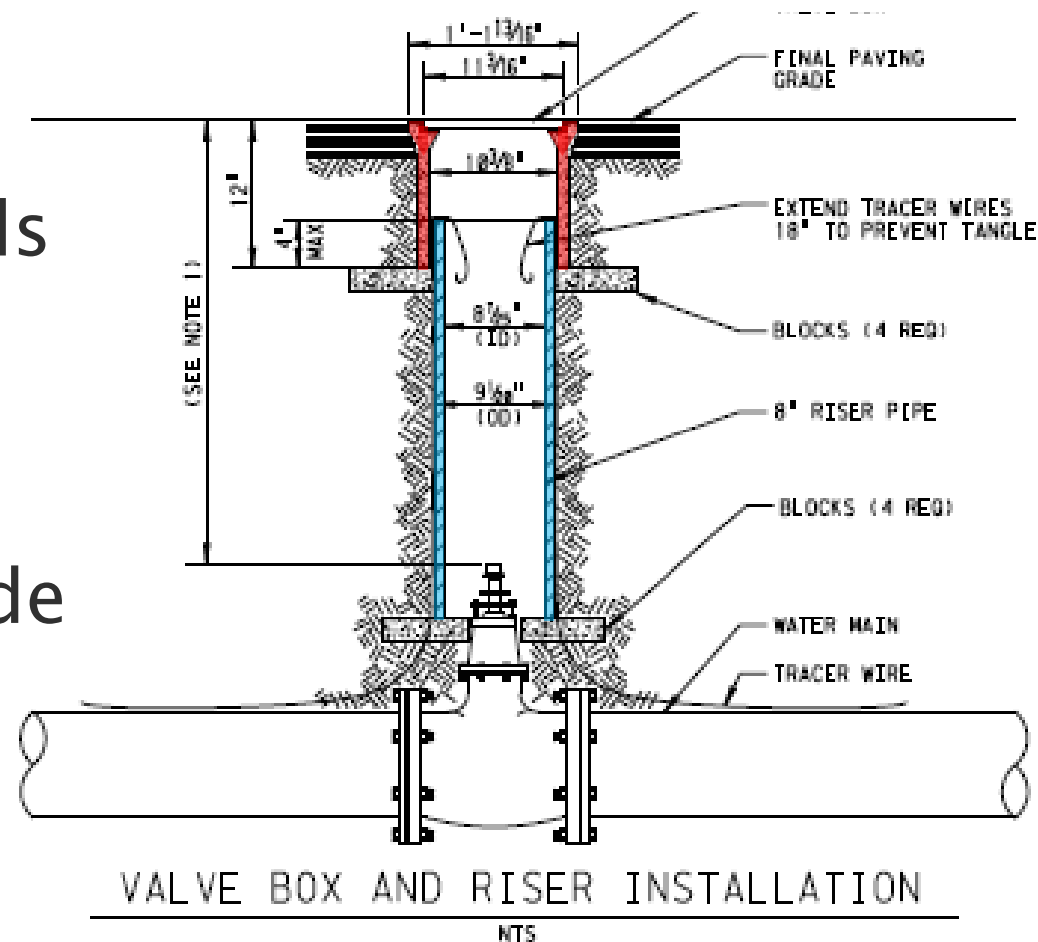
- Plumber injury on 2/25/15
 - Loss of very tip of finger
 - General Citation
 - Failed to identify, evaluate, and correct hazards associated with gate valve box installation
 - Fine of \$340



Corrective Actions



- Job Hazard Analysis
 - Review all hazards including pinch points
 - Revised standard drawing to provide clearance



Cal/OSHA Investigations



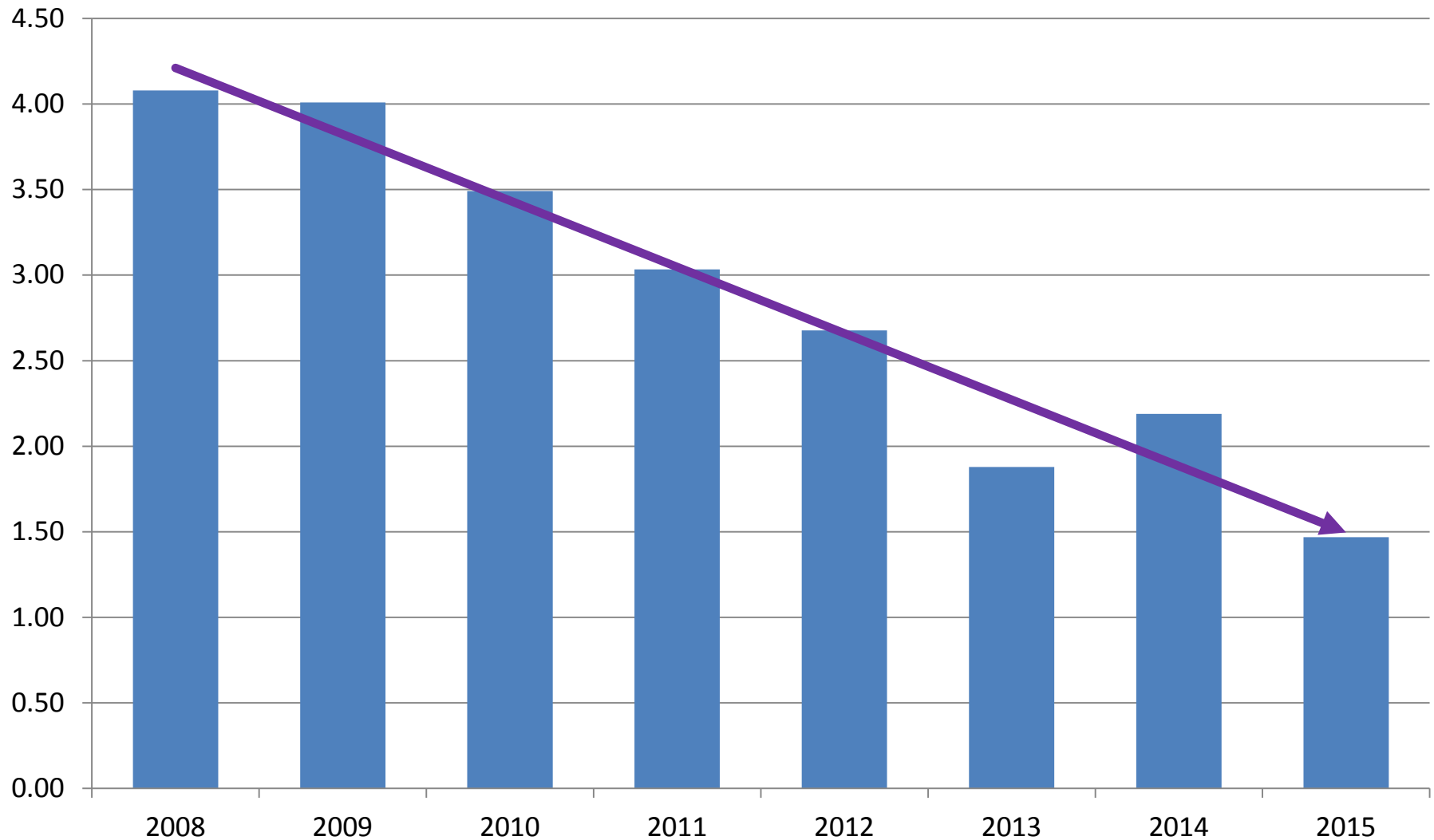
- Employee complaint on 3/10/15
 - Asbestos removal at South Reservoir
 - Notice of No Violation

Safety Program Review



- Strategic Plan KPI for employee wellness
 - Employee injury & illness lost time incidence rate ≤ 3.0

District Lost Time Injury Rate



Lost Time Hours



YEAR	LOST TIME HOURS	FTE*
2008	41,887	23.3
2009	34,260	19
2010	35,213	19.5
2011	29,736	16.5
2012	33,077	18.4
2013	23,887	13.3
2014	21,026	11.7
2015 (thru August)	10,884	6

2008 – 62 Lost Time Cases

2015 – 15 Lost Time Cases (thru September)

Upcoming Activities



- Implement new statewide discharge permit
- Monitor Penn Mine landfill for water intrusion
- Close out remediation activities at Lake Chabot Machine Gun Range
- Negotiate cost sharing with BLM for mine tailings pond remediation