
San Francisco Bay Regional Water Quality Control Board

Sent Via Email

January 9, 2015

To: Attached Mailing List

Subject: Conditional Approval of Scoping and Evaluation Plan for Potential Nutrient Reduction by Treatment Optimization and Treatment Upgrades, Order No. R2-2014-0014, NPDES Permit No. CA0038873

This letter conditionally approves the Scoping and Evaluation Plan (hereafter Plan), dated November 26, 2014, for potential nutrient reduction by treatment optimization and treatment upgrades. The Bay Area Clean Water Agencies (BACWA) submitted the Plan on behalf of all major municipal wastewater treatment plants to satisfy provisions C.1 and C.2 of Order No. R2-2014-0014.

Background

Order No. R2-2014-0014 requires all major municipal wastewater treatment plants that discharge to San Francisco Bay to submit a scoping and evaluation plan that includes an approach and a schedule for completing nutrient reduction studies by plant optimization and upgrades, as well as by other means. The Plan describes the following approach to comply with this requirement:

- Develop a range of nutrient removal levels for treatment plant upgrades (nutrient removal levels from treatment optimization will be plant-specific);
- Collect data and information from each plant through a questionnaire to allow for a preliminary assessment of treatment optimization and upgrade strategies;
- Conduct site visits at each plant to evaluate the preliminary assessment made from the questionnaire and identify additional nutrient reduction strategies;
- Identify nutrient reductions achievable through plant optimization, sidestream treatment, and facility upgrades for each plant; and
- Compile existing information to identify options for reducing nutrient loads by other means, such as water recycling, wetland treatment, etc.

Conditions of Approval

While we agree with the conceptual approach described in the Plan, we have concerns with the details associated with (1) accommodating growth for treatment optimization, (2) fostering innovative technologies, and (3) developing treatment removal levels for total nitrogen. As such, this letter approves the Plan with the following conditions:

- 1) The treatment optimization evaluation must consider growth on a site-specific basis. The Plan states an intent to use a default growth allowance of 15 percent for each plant when considering treatment optimization options. However, it is not appropriate to provide the

same growth allowance for all plants. Impacts to treatment from growth may be related to increasing flows, loads, or both. Any allowance for expected growth must be facility specific and based on facility-specific documentation of projected growth and projected changes in flows and loads and how much excess treatment capacity may be lost from such growth.

- 2) The upgrade evaluation must include development of recommended next steps to facilitate timely implementation of promising technologies. While the Plan states that innovative technologies will be identified that could be applicable to each plant, it does not indicate that it will include cost estimates or next steps for furthering the implementation of such technologies. We are concerned that if costs and next steps are not identified, plant managers will not have enough information to confidently move forward with an innovative technology should nutrient removal become necessary.
- 3) The upgrade evaluation must include a higher level of treatment for total nitrogen. The Plan targets two treatment levels associated with the upgrade evaluation. However, the most aggressive treatment level for total nitrogen would result in seasonal discharges of up to 6 mg/L. We understand that this level was chosen because it would not require much chemical use; however, a higher level of treatment for total nitrogen (e.g., 3 to 4 mg/L) must be included. This is because if it is necessary for some plants to achieve a higher treatment level, then it would be useful to define the impact on plants as part of this effort instead of having to do so later. Finally, one outcome of the upgrade evaluation must also qualitatively equate the targeted seasonal treatment levels with different averaging periods (e.g., monthly and daily). This would be useful to better understand potential variability in treatment effectiveness.

We appreciate the effort put forth by BACWA and its team of consultants in preparing the Plan and for meeting with us on December 15, 2014. If you have any questions regarding this letter, please contact Robert Schlipf at (510) 622-2478 or by email robert.schlipf@waterboards.ca.gov.

Sincerely,

Bruce H. Wolfe
Executive Officer

Copy (sent via email):

Ian Wren, San Francisco Baykeeper, ian@baykeeper.org
Terri Fleming, U.S. EPA, Region 9, Fleming.Terrence@epa.gov
Robyn Stuber, U.S. EPA, Region 9, stuber.robbyn@epa.gov
Michael Falk, HDR, Mike.Falk@hdrinc.com

Peter Lee (plee@cityofamericancanyon.org)
City of American Canyon
Wastewater Systems Manager
300 Crawford Way
American Canyon, CA 94503

Jeff Gregory (jgregory@ci.benicia.ca.us)
Superintendent
City of Benicia
614 East Fifth Street
Benicia, CA 94510

Syed Murtuza (smurtuza@burlingame.org)
City of Burlingame
Director of Public Works
501 Primrose
Burlingame, CA 94010

Melody LaBella (mlabella@centralsan.org)
Associate Engineer
Central Contra Costa Sanitary District
5019 Imhoff Place
Martinez, CA 94553

Michael Kirker (mkirker@town.crockett.ca.us)
Port Costa Manager
Crockett Community Services District
Crockett, CA 94525

Robert Cole (rcole@cmsa.us)
Central Marin Sanitation Agency
Environmental Services Manager
1301 Andersen Drive
San Rafael, CA 94901

Meg Herston (mherston@fssd.com)
Fairfield-Suisun Sewer District
1010 Chadbourne Road
Fairfield, CA 94534

Gary W. Darling (GaryD@ddsd.org)
General Manager
Delta Diablo Sanitation District
2500 Pittsburg-Antioch Highway
Antioch, CA 94509

Mike Connor (mconnor@ebda.org)
General Manager
East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580

Ben Horenstein (bhorenst@ebmud.com)
East Bay Municipal Utilities District
P.O. Box 24055
Oakland, CA 94623-1055

Dale McDonald (manager@town.crockett.ca.us)
General Manager
Crockett Community Services District
P.O. Box 578
Crockett, CA 94525

Mark Williams (mwilliams@lgvsd.org)
District Manager
Las Gallinas Valley Sanitation District
300 Smith Ranch Rd
San Rafael, CA 94903-1929

Tony Rubio (trubio@sani5.org)
District Manager
Sanitary District No. 5 of Marin County
P.O. Box 227
Tiburon, CA 94920

Joe Magner (jmagner@ci.millbrae.ca.us)
City of Millbrae
621 Magnolia Avenue
Millbrae, CA 94030

Neal Allen (nallen@mvsd.org)
District Manager
Lilia Corona (LCorona@mvsd.org)
District Chemist
Mt. View Sanitary District
P. O. Box 2757
Martinez, CA 94553

Tim Healy (thealy@napasan.com)
Assistant General Manager/District Engineer
Napa Sanitation District
P.O. Box 2480
935 Hartle Court
Napa, CA 94559

Sandeep Karkal (SandeepK@novatosan.com)
Manager-Engineer
Novato Sanitary District
500 Davidson Street
Novato, CA 94945

James Allen (James.Allen@CityofPaloAlto.org)
Plant Manager
City of Palo Alto
2501 Embarcadero Way
Palo Alto, CA 94303

Lena Cox (lcox@ci.petaluma.ca.us)
Environmental Services Supervisor
City of Petaluma
202 N. McDowell Blvd.
Petaluma, CA 94954

Ron Tobey (rtobey@ci.pinole.ca.us)
Plant Manager
City of Pinole
1 Tennant Avenue
Pinole, CA, 94564

Steven S. Beall (bealls@rodeosan.org)
Engineer-Manager
Rodeo Sanitary District
800 San Pablo Avenue
Rodeo, CA 94572

Tommy Moala (tmoala@sfwater.org)
City and County of San Francisco
1155 Market Street, 11th Floor
San Francisco, CA 94103

Bill Zolan (bill.zolan@flysfo.com)
Supervising Chemist
San Francisco International Airport
P. O. Box 8097
676 McDonnell Road
San Francisco, CA 94128

Brad Underwood
Director of Public Works
(bunderwood@cityofsanmateo.org)
City of San Mateo
2050 Detroit Drive
San Mateo, CA 94404

Jim Ervin (james.ervin@sanjoseca.gov)
City of San Jose
Water Pollution Control
700 Los Esteros Road
San Jose, CA 95134

Daniel Child (dchild@svcw.org)
Manager
Silicon Valley Clean Water
1400 Radio Road
Redwood City, CA 94065

Craig Justice (craig@smcsd.net)
General Manager
Sausalito-Marín City Sanitary District
#1 East Road
P.O. Box 39
Sausalito, CA 94966-0039

Mark Grushayev
(mgrushayev@cityofmillvalley.org)
General Manager
Sewer Agency of Southern Marin
26 Corte Madera Ave.
Mill Valley, CA 94941

Wendy Gjestland (Wendy.Gjestland@scwa.ca.gov)
Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

E.J. Shalaby (eshalaby@wcwd.org)
District Manager
West County Agency
2910 Hilltop Drive
Richmond, CA 94806

Brian Schumacker (Brian.Schumacker@ssf.net)
Plant Superintendent
South San Francisco-San Bruno Water Pollution
Control Plant
195 Belle Air Road
South San Francisco, CA 94080

Melody Tovar (mtovar@sunnyvale.ca.us)
Regulatory Programs Division Manager
City of Sunnyvale
Sunnyvale Water Pollution Control Plant
P.O. Box 3707
Sunnyvale, CA 94088-3707

Patricia McFadden (patricia.a.mcfadden@navy.mil)
San Francisco Bay Area
Navy BRAC PMOW
410 Palm Avenue, Bldg 1, Suite 161
Treasure Island
San Francisco, CA 94130-1807

Melissa Morton (mmorton@vsfcd.com)
District Manager
Vallejo Sanitation and Flood Control District
450 Ryder Street
Vallejo, CA 94590

Darren Greenwood
(dggreenwood@ci.livermore.ca.us)
Water Resources Manager
City of Livermore
101 W. Jack London Blvd.
Livermore, CA 94551

Alex Ameri (alex.ameri@hayward-ca.gov)
Director of Public Works
Hayward Water Pollution Control Facility
3700 Enterprise Avenue
Hayward, CA 94540

Dean Wilson (dwilson@sanleandro.org)
Water Pollution Control Manager
San Leandro Water Pollution Control Plant
3000 Davis Street
San Leandro, CA 94577

Jason Warner (jwarner@oroloma.org)
General Manager
Oro Loma and Castro Valley Sanitary Districts
2600 Grant Avenue
San Leandro, CA 94577

Tim Grillo (tim_grillo@unionsanitary.com)
Process Engineer
Union Sanitary District
5072 Benson Road
Union City, CA 94587

Daniel Gallagher (gallagher@dsrsd.com)
Operations Manager
Dublin San Ramon Services District
7051 Dublin Blvd.
Dublin, CA 94568