State of California
Regional Water Quality Control Board
North Coast Region

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May 25, 2010

Executive Officer's Summary Report
8:30 a.m., June 10, 2010
Regional Water Quality Control Board
David C. Joseph Hearing Room
5550 Skylane Blvd., Suite A
Santa Rosa, California

Item: 11

Subject: Public Hearing on Order No.R1-2010-0017 to consider adoption of Waste Discharge Requirements for the City of Willits Wastewater Treatment Facility, NPDES Permit No. CA0023060, WDID No. 1B80078OMEN.

DISCUSSION

The City of Willits (hereinafter Discharger or City) owns and operates a municipal wastewater treatment facility (WWTF) and associated wastewater collection, reclamation, and disposal facilities that serve a population of 9,500 residential and commercial users. The WWTF receives wastewater from the City of Willits, the Brooktrails Community Services District (CSD), and the Meadowbrook Manor Sanitation District and accepts from septage from local area haulers. The WWTF is currently discharging under Order No. R1-2001-0071 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023060 adopted on June 28, 2001.

The existing WWTF consists of an extended aeration activated sludge process followed by clarification and chlorine disinfection. The average dry weather design flow capacity of the existing WWTF is 1.3 million gallons per day (mgd) and the peak wet weather design flow capacity is 3.0 mgd. Primary treatment, including solids and grit removal occurs in the new headworks building and influent pump station constructed as phase one of WWTF upgrades. The headworks is preceded by wet weather equalization basins with up to 16 mgd capacity, allowing flows in excess of treatment capacity to be temporarily diverted and returned for treatment when influent flows subside.

During the discharge season, wastewater is currently discharged to Outlet Creek, a tributary to the Eel River, at Discharge Point 001 just downstream of the confluence of Baechtel Creek and Broaddus Creek. The Water Quality Control Plan for the North Coast Region (Basin Plan) limits discharges to the Eel River and its tributaries to 1 percent of the receiving water flow (1:100) unless an exception to the requirement is granted by the Regional Water Quality Control Board (Regional Water Board). Exceptions are given for cause on a case-by-case basis. The Willits WWTF routinely exceeds the 1:100 discharge rate and has been under Cease and Desist Order from the Regional Water Board to mitigate this violation since 2001.

In order to consistently achieve effluent of sufficient quality to protect beneficial uses and become eligible for an exception to the Basin Plan discharge rate requirements, the Discharger is constructing a new WWTF. The new WWTF will be sized and constructed to provide current required treatment capacity and accommodate anticipated growth through 2025. Although treatment components of the new WWTF have been designed to accommodate flows up to 7.0 mgd, the Discharger has requested a permitted discharge of an average monthly flow up to 4.0 mgd for the current permit cycle. The new WWTF will include the equalization ponds and new headworks building, as described above, an enhanced extended aeration activated sludge mechanical secondary treatment process with nutrient removal, new circular clarifiers, ultraviolet (UV) disinfection, followed by enhanced effluent treatment (including additional nutrient removal) and storage within a new treatment wetland.

When all components of the new WWTF are complete, the new WWTF will discharge from the treatment wetland into Outlet Creek downstream of the existing/historic point of discharge. As discussed in detail in section IV.C, of the Fact Sheet, improved treatment capabilities for conventional and biostimulatory pollutants in the new WWTF are projected to meet water quality criteria for the protection of surface water beneficial uses at a discharge rate up to 1:10 (ten percent of receiving water flow). In accordance with the findings of the City's request for an exception to the Basin Plan discharge rate requirements, the draft Order allows a relaxed discharge rate of 10 percent of the receiving water from the end of the enhancement wetlands.

A period of two to three growing seasons will be necessary to allow the new enhancement wetland vegetation to fully establish prior to operation. Flooding of treatment wetlands prior to plant establishment can cause significant loss of wetland vegetation, leading to short circuiting of the system and ultimately poor performance. The enhancement wetlands are a critical part of the treatment system and need to be fully functional to achieve the desired water quality results. The draft Order requires the enhancement wetlands be ready for operation no later than October 1, 2012. The Discharger anticipates that the mechanical portion of the new WWTF will be operational prior to the October 1, 2012 date. During the interim period, the new mechanical WWTF will continue to discharge at the end of the mechanical treatment process at the existing discharge location under more restrictive limitations than those applying to the existing WWTF.

During the summertime discharge prohibition season and other periods of dry weather, treated wastewater is used for spray irrigation on up to 200 acres of pasture located adjacent to the WWTF. The draft Order serves as a Master Reclamation Permit regulating the use of recycled water. In addition, the draft Order includes a Special Study to evaluate nutrient, salt, and water balances, which will dictate the appropriate application rates for recycled water use.

Draft Order R1-2010-0017 maintains the requirements for the existing WWTF adopted in June 2001. However, effluent limitations for the new WWTF are significantly more

stringent based upon the ability of the new WWTF to provide a consistently higher quality effluent. In addition, effluent limitations have been established for nitrogen compounds and priority pollutants (cyanide, dichlorobromomethane) which demonstrated reasonable potential to cause or contribute to exceedances of applicable water quality criteria. Changes to monitoring include lowering of requisite analytical detection levels for compliance assessment with chlorine effluent limitations in order to better evaluate potential impacts to aquatic organisms, and increased effluent and surface water monitoring frequencies. Monitoring and reporting requirements will now include nitrogen compounds, total phosphorus, increased receiving water monitoring, irrigation management practices, and septage receiving documentation and analyses. The draft Order also requires the Discharger to obtain coverage under the *General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities* (State Water Board Order No. 2004-0012-DWQ) or other appropriate waste discharge requirements for the discharge of biosolids from the WWTF.

A copy of the draft Order and/or information to access the draft on the Regional Water Board website was mailed to the Discharger, interested agencies, and persons. This item was opened for public comment from March 31, 2010 to April 30, 2010. Comments were received during the public comment period from the Brooktrails Community Services District (CSD) on April 23rd, Humboldt Baykeeper on April 30th, and the Discharger on April 30th. Clarification of the Discharger's April 30th comments were received on May 7th, May 17th , May 19th, and May 20th. A summary of the comments is included below. Copies of all public comments, letters of clarification and staff's written responses have been included as attachments with the full agenda package.

Brooktrails CSD expressed concern regarding the City's request to limit the proposed discharge rate to 4.0 mgd rather than the full design capacity of 7.0 mgd. Staff spoke directly with the CSD staff and sent a written response indicating that the permitted flow of 4.0 mgd applied specifically to the pending permit cycle. Additional flow can be permitted at the request of the Discharger during future application and permitting cycles up to the design capacity.

The Humboldt Baykeeper organization (Baykeeper) expressed numerous questions and concerns. In summary they questioned the discrepancy between application of daily effluent limitations for constituents when monitoring is required on a less frequent basis; disagreed with the proposed exception to the standard Basin Plan discharge rate based upon incomplete mixing of the effluent with the receiving water, stating that the draft Order lacked the justification for such an exception; indicated concern regarding the reasonable potential for several constituents to cause exceedances of water quality criteria; expressed concern that backsliding may be permitted in the draft; and noted particular concern that increased levels of ammonia and nitrogen compounds may be allowed to discharge to Outlet Creek. Staff provided an extensive written response for each of Baykeeper's concerns, none of which resulted in modifications to the draft Order.

The Discharger's April 30th correspondence indicated their uncertainty regarding the ability of the new WWTF system design to meet all of the draft Order requirements and requested an additional 30 days to review and comment on the draft Order. In discussions with the City, staff determined that the City's comments would not result in significant changes and agreed to modify the draft Order prior to the June hearing provided the City would submit additional clarifications to the identified areas of concern. Staff has continued to work with the City and their representatives to make changes where necessary to promote the success of the WWTF upgrades and the enhanced protection of the beneficial uses of surface and groundwater resources.

PRELIMINARY STAFF RECOMMENDATION Adopt the Order as proposed.