

PROSECUTION TEAM STAFF REPORT AND RESPONSE TO COMMENTS
CONSIDERATION OF A CEASE AND DESIST ORDER AND CONNECTION
RESTRICTION
FOR
NAPA BERRYESSA RESORT IMPROVEMENT DISTRICT
WASTEWATER TREATMENT FACILITY
NAPA COUNTY

Note: This document has been prepared by the Central Valley Water Board's Prosecution Team

Introduction

The Napa Berryessa Resort Improvement District (Discharger) owns and operates a wastewater treatment facility near the southwestern arm of Lake Berryessa. The facility was constructed to serve both a housing subdivision and a lakeside recreational resort on land owned by the U.S. Bureau of Reclamation (Reclamation). Wastewater receives secondary treatment and is disinfected before it is discharged to four spray fields on a hillside above the lake. The Discharger is regulated by Waste Discharge Requirements (WDRs) Order 95-173, which allows treatment and disposal of a monthly average flow of 50,000 gallons per day (gpd) of domestic wastewater.

Reclamation's resort is operated by a concessionaire. Prior to May 2009, the resort generated wastewater from campsites, day-use areas, a motel, and mobile homes. Wastewater flows from the resort were equivalent to approximately 228 equivalent dwelling units (EDUs). However, the concession contract expired in May 2009, and the resort closed on 31 October 2009. At that time, the sewer was disconnected and wastewater ceased flowing into the Discharger's collection system.

In April 2010, a new concessionaire signed an agreement with Reclamation to operate the resort. The resort reopened in May 2010 for limited use. There is no potable water supply, and portable toilets are the only sanitation facilities available. Sewage is currently trucked to the Napa Sanitation District, which has capacity to accept the waste. The new concessionaire, The Pensus Group, plans to construct a new resort, including a new sewer system which would be connected to the Discharger's wastewater collection system. Pensus is currently working on conceptual development plans, which include a boutique resort, between 25 and 80 bedroom units, a restaurant, RV sites, boat storage, and boat docks.

The Berryessa Highlands subdivision currently consists of 330 EDUs. At full build out, the subdivision would have up to 561 EDUs. Despite the fact that the subdivision is not fully developed, influent flows to the wastewater treatment facility have regularly exceeded the flow limits in the WDRs. However, with the closure of the resort last fall, the Discharger has been able to comply with its flow limit for the first time in many years.

Wastewater is conveyed by gravity sewers, lift stations, and force mains to the wastewater treatment facility. The treatment system is an extended aeration activated sludge plant that provides secondary treatment, clarification and disinfection. Disinfected wastewater is pumped to a remote effluent disposal site consisting of a 60-acre spray disposal area and a tailwater collection pond.

Previous Enforcement

The Discharger has a history of violations dating back to at least 1995. The majority of these violations were due to high sewer inflow/infiltration (I/I) flows and inadequate wastewater storage and disposal capacity. The violations include discharges of treated wastewater to Lake Berryessa.

As a result of the Discharger's failure to comply with its WDRs, the Central Valley Water Board adopted Cease and Desist Order (CDO) No. 96-232 on 20 September 1996. The primary requirement of the 1996 CDO was to expand the wastewater treatment facility's storage and disposal capacity to prevent ongoing spills to surface waters. Although the Discharger submitted a financing plan for the expansion, the Discharger never constructed any of the capacity improvements needed to comply with the WDRs.

The Discharger continued to violate the WDRs, and continued to spill wastewater into Lake Berryessa. The Central Valley Water Board subsequently gave the Discharger a second time schedule to make capacity improvements with the adoption of CDO R5-2006-0113 on 26 October 2006. Although the Discharger's influent flow meter did not operate properly prior to 2006, it was apparent by this time that sewer I/I was a serious problem that contributed significantly to the lack of storage and disposal capacity. The 2006 CDO included a sewer connection restriction because the capacity deficit was severe enough that the Discharger was consistently unable to comply with the flow limit in the WDRs. In addition, the Discharger applied wastewater to the spray fields in violation of the WDRs on numerous occasions to avoid discharges of wastewater to Lake Berryessa.

Among other tasks, the 2006 CDO required the Discharger to submit a *Wastewater Disposal Plan*, an *Inflow/Infiltration Assessment Report*, and a *Report of Waste Discharge* reflecting planned upgrades to the treatment facility. The CDO required that the conditions leading to the ongoing violations be corrected by 1 January 2012. Although there is still one year left in the 2006 CDO's time schedule, the Discharger will be unable to comply with that deadline because it has not obtained the financing needed to design and construct the capacity improvements.

Basis for 2010 CDO and Expanded Connection Restriction

Since adoption of the 2006 CDO, the Discharger has completed the required technical studies and submitted a Report of Waste Discharge. However, the Discharger has not obtained financing to complete the required facility improvements, and some previous studies need to be reevaluated in the face of evidence that contradicts their findings.

The Discharger's 30 August 2007 *Inflow/Infiltration Assessment Report* found that the public portion of sewer system experiences excessive I/I, even during years with subnormal rainfall. The sources and locations of the I/I have not yet been determined, and no repairs have yet been made. Since Reclamation's resort closed in late 2009, influent flows have been below the permitted flow limit. However, despite near normal rainfall during the 2009-2010 rainy season and significantly reduced I/I (presumably due to the closure of the resort's sewer system), the Discharger released over 1.4 million gallons of treated effluent to Lake Berryessa between January and June 2010.

The assumptions made in the 2007 *I/I Assessment Report* need to be revisited based on the recent spills. It is critical that the Discharger have a good understanding of the I/I characteristics of its collection system in order to design enough storage and disposal capacity to manage all of the wastewater flows. Once the I/I Report is revised, the Discharger will need to revise its *Wastewater Disposal Plan* and then submit a new *Report of Waste Discharge*.

The following issues also warrant reconsideration of the scope of work and the compliance schedule:

- a. Elimination of I/I may not be feasible as a long-term solution to the Discharger's capacity problems. I/I should be further evaluated and the long-term design rate for an acceptable amount of I/I should be selected to form the design basis for the facility expansion.
- b. In light of the recent economic downturn and Pensus' resort development schedule, the Discharger's reliance on a bond issue to fund facility improvements may not be the best financing option. The proposed CDO gives the Discharger an opportunity to pursue alternative funding for the expansion while completing interim work.
- c. The District, Reclamation, and Pensus need to work together to determine the volume of wastewater that will be discharged from the new resort, the timing of the resort redevelopment, and an appropriate means for Pensus to finance the improvements needed to accommodate the resort's wastewater flows.
- d. Additional time will also allow the Discharger to reconsider its options for increasing effluent disposal capacity, which might include agreements with adjacent landowners.

The Prosecution Team recommends that the Board issue the Discharger a third and final time schedule to make capacity improvements at this facility. Because the Discharger has asked for at least five years to finance, plan, and construct the improvements, the Prosecution Team also recommends that the Board (a) continue the connection restriction on the housing subdivision which was initiated with the 2006 CDO; and (b) expand the connection restriction to cover Reclamation's resort, which has been disconnected and has not discharged into the system since October 2009.

An expanded connection restriction is necessary because the 1.4-million gallon spill this spring shows that Discharger does not have the storage and disposal capacity needed to prevent spills to surface waters, even with normal rainfall and when influent flows are below the permitted flow limits. Allowing a new resort to connect to the wastewater treatment facility would only exacerbate the problems that led to the spills earlier this year.

Legal Considerations for Imposing and Lifting a Sewer Connection Restriction

On 26 October 2006, the Board adopted a Connection Restriction for the Napa Berryessa Resort Improvement District. As stated above, the Prosecution Team recommends that that

restriction remains in place because the Discharger has not constructed any capacity improvements needed to prevent discharges of waste to surface waters. The basis for imposing connection restrictions is found in Title 23 of the California Code of Regulations, section 2244 et seq. As described in this section, the connection restriction applies to connections to the sewage collection system by individual households or businesses that did not have a building permit approved prior to the 12 September 2006 Public Hearing Notice, except under the following conditions:

- a. Projects for which building permits were issued prior to the 12 September 2006 Public Hearing Notice;
- b. Projects which normally do not require a building permit and for which construction commenced prior to the 12 September 2006 Public Hearing Notice;
- c. Projects which would eliminate discharges from existing dwellings which have failing systems whose threat to water quality or public health is greater than that of the existing collection system;
- d. Projects that would alleviate an extreme public hardship or public health problem.
- e. Five specific projects for which all steps to obtain a building permit were completed prior to adoption of the 2006 CDO.

The Prosecution Team also recommends that Reclamation's resort concessionaire be prohibited from connecting to the Discharger's sewer system until the Discharger has increased the storage and disposal capacity and has shown that it can accept the wastewater and remain in compliance with the WDRs. Alternatively, the Board may allow interim sewage connections under certain circumstances, as described in section 2244.3 of Title 23. If the Discharger is able to comply with the following conditions, then staff would ask that the Board consider allowing interim connections, including possibly Reclamation's resort connection. Interim connections may be considered if:

- a. Consistent compliance with requirements can be achieved only by construction of a facility which will take a substantial period of time to complete;
- b. The Discharger has the capacity, authority, and financial resources to complete the corrective measures necessary to achieve compliance and is currently proceeding with such corrective measures;
- c. The corrective measures necessary to achieve compliance will be completed and placed into operation by the Discharger in the shortest practicable time;
- d. All practicable interim repairs and improvements which can be made have been made; and
- e. During the interim period of time until compliance with requirements can be fully achieved, the discharge will be managed, operated, maintained and repaired so as to reduce to a minimum the violations which resulted in the imposition of the connection restriction, and that such minimum violations for the interim period of time involved will not significantly impair water quality or beneficial uses.

PUBLIC COMMENTS ON THE DRAFT CEASE AND DESIST ORDER

The Draft Cease and Desist Order was transmitted for public review on 10 August 2010. Comments were received from Napa Berryessa Resort Improvement District (Discharger), the U.S. Bureau of Reclamation, and The Pensus Group (the resort concessionaire) within the prescribed comment period. Although there was significant public opposition to the connection restriction prior to adoption of the previous (2006) Cease and Desist Order, it is interesting to note that no comments were received regarding the connection restriction during this comment period.

Copies of the comment letters are provided in Attachment A, and the Prosecution Team's responses to key comments are presented below.

Napa Berryessa Resort Improvement District

Comment:

The Discharger requested certain clarifications and revisions of the findings. The Discharger also requested that the final compliance dates for expansion/improvement of the WWTF be extended by one year if the Discharger determines that the improvement project(s) will require an Environmental Impact Report and/or Environmental Impact Statement.

Staff Response:

The Discharger reviewed an administrative draft version of the compliance schedule and made several requests for extended deadline. The prosecution Team accommodated most of those requests, incorporating changes before the draft CDO was issued for public review.

The Discharger also requested additional time to complete the facility expansion project if a full Environmental Impact Report (EIR) is required. The Prosecution Team accepted this proposal and incorporated the requested extensions for both the interim and final submittals associated with the expansion/improvement project(s). However, the Central Valley Water Board should be aware that there is an ongoing risk of significant wastewater spills until the facility expansion is completed. In addition, the Discharger should be aware that issuance of a CDO does not provide protection from Administrative Civil Liabilities and other enforcement actions, should the wastewater spills continue.

Comment:

The Discharger requested that it not be required to make another attempt to install a background groundwater monitoring well at the effluent disposal site. The Discharger submitted a Declaration by a registered Professional Geologist as an attachment to its comments letter. The Declaration stated that shallow groundwater is consistently present in the two compliance wells around the unlined tailwater storage pond, and is:

"...believed to be sustained principally by the discharge from the sprayfield and potential seepage from the [tailwater storage pond]. In the absence of this source of water, it is likely that no groundwater would be sustained within this stratigraphic zone."

Because of the steep terrain at the site, the District's geologist stated that there is no practical access to the areas above the sprayfields for well installation, and that a background well in another nearby drainage would be inappropriate. The Declaration also stated:

"In my professional opinion, the focus should be on evaluation of the water quality observed in the two [compliance] wells that the District has been monitoring for over three years. The water quality at these locations is clearly representative of worst-case impacts from the District's operations. Analysis of the potential impacts to local groundwater quality and any impediments on beneficial uses could be determined readily from these data."

Staff Response:

The Prosecution Team agrees that the site is not ideal for subsurface exploration because of both steep terrain and shallow bedrock. However, the previous attempt to install a background well did not utilize drilling equipment suited for drilling into bedrock. Consequently, the existing background well did not extend into the bedrock. The bedrock in that area is likely fractured and may contain, or be a seasonal conduit for, recharge from the upslope portion of the site outside of the influence of the sprayfields and tailwater storage pond. Such a recharge zone, if it exists, would be the best indicator of background groundwater quality for this site.

The Prosecution Team also agrees that the two compliance wells are likely monitoring infiltrate from the tailwater pond and the sprayfields. This shallow groundwater is likely being transmitted down slope and off site. Background groundwater quality must be evaluated so that staff can determine whether the degradation caused by this infiltration complies with the Groundwater Limitations of the WDRs and applicable policies. The Prosecution Team believes it is reasonable and appropriate to require that the Discharger make a good faith attempt to monitor background groundwater by using appropriate drilling equipment to install a well that penetrates the competent bedrock. The draft CDO has been revised to reflect this specific expectation, and does not require that the Discharger undertake overly burdensome geological investigations.

US Bureau of Reclamation

Comments:

Reclamation states that it is ready to work cooperatively with the Discharger and Pensus to respond to the Order, and that it has an obligation to protect Lake Berryessa's water quality. The letter also stated that Pensus may need to start discharging into the Discharger's wastewater collection system in the spring of 2011. In addition, Reclamation recommends that the Board postpone consideration of the Order until "...the parties have time to review and evaluate Pensus' forthcoming CFIP [Concession Facilities Improvement Plan] and IMP [Improvement Management Plan]."

Staff response:

Pensus has not provided specific improvement plans or a schedule for development. Therefore, it is not clear why Pensus would need to discharge to the Discharger's collection system in the spring of 2011. The resort development description provided in Pensus' comments letter indicates that the only use of the resort at that time would be boat launching and possibly recreational vehicle camping. Pensus has not submitted any evidence that the continued use of portable toilets during interim resort operations is not possible or economically burdensome. If Pensus wishes to expedite its development plans and/or connection to the collection system, then it may work with the Discharger to expand the treatment facility to accommodate resort sewer service earlier than the deadlines in the proposed Order. If such an effort were to be successful, the Central Valley Water Board could allow interim sewage connections when sufficient sewer infrastructure and capacity are available.

Regarding Reclamation's request to postpone the hearing, this is the Discharger's third Cease and Desist Order in 14 years, and represents the second significant extension to the Discharger's compliance schedule. Due to the severity of the capacity problem and the seriousness of this year's releases of wastewater into the lake, the proposed Order contains time-critical tasks, including interim measures to prevent wastewater spills to surface waters this winter and additional winter I/I studies to update the inflow/infiltration evaluation.

Additionally, it is unlikely that Pensus and Reclamation could develop a plan that would significantly influence the scope of work required in the Order or the time schedule for compliance within the next few months. As noted above, if Reclamation and Pensus would like to expedite report development, they are free to work with the Discharger to accomplish that end. Therefore, there is no compelling reason to delay consideration of this Order.

The Pensus Group

Comments:

Pensus agreed with Reclamation's comments and also requested that the hearing be delayed.

Staff response:

See the response to Reclamations comments above. The conceptual plans for the resort that were submitted with Pensus' letter indicate that Pensus plans on building its first lodging units in 2015. Prior to that, Pensus would construct 31 recreational vehicle camping sites and refurbish the existing boat launch ramp. The conceptual plans state that new sewers will be constructed to allow connection to the Discharger's collection system for the overall development but did not indicate that there was any expectation of sewer connection in 2011. Additionally, sewage pumping or discharge facilities are not always available to owners of recreational vehicles at campgrounds, so there is no public health basis for requiring sewer service for the campground.

OUTSTANDING ISSUES

There appear to be only two outstanding issues.

1. **Should the hearing be delayed?** Reclamation and Pensus have requested that the hearing be delayed to some unspecified future date. However, as described above, the proposed Order contains time-critical tasks that must be completed by the Discharger this winter in order to minimize overflows and complete the studies needed to design upgrades. The proposed Order allows Reclamation and Pensus almost a year to discuss wastewater disposal needs with the Discharger, and come to agreement on how to finance the project. If all parties agree, the expansion project could be expedited to accommodate the resort earlier than the deadlines in the proposed Order. Therefore, the Prosecution Team believes that there is no reason to delay consideration of this Order.
2. **Should the Order require installation of a background groundwater monitoring well?** The Prosecution Team believes that a determination of background groundwater quality is needed to support revision of the WDRs for the planned expansion. Although the Discharger installed a background monitoring well, the well did not fully penetrate the bedrock, and has consistently been dry. It is possible that groundwater exists within the deeper fractured bedrock, and staff believes that the Discharger should make a good faith attempt to install a functional background well using appropriate drilling techniques. If this effort is not fruitful, it would then be reasonable to conclude that it is not feasible to install a background well at the current disposal site.

SUMMARY AND RECOMMENDATION

The Prosecution Team recommends that the Board issue the Discharger a third, and final, CDO containing a time schedule to make capacity improvements at this facility. Because the Discharger has asked for at least five years to finance, plan, and construct the improvements, the Prosecution Team also recommends that the Board (a) continue the connection restriction on the housing subdivision which was initiated with the 2006 CDO, and (b) expand the connection restriction to include Reclamation's resort, which has not discharged into the system since October 2009.

Attachment A: Comment Letters

gjc/alo/wsw: 3 September 2010

22/23/24 September 2010 Central Valley Water Board meeting