Public Comment Sanitary Sewer System WDR Deadline: 5/13/11 by 12 noon



California Sportfishing Protection Alliance

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10 May 2011

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 "T" Street, 24th Floor
P.O. Box 100
Sacramento, CA 95814
commentletters@waterboards.ca.gov

RE: Comment Letter – SSS WDRs Review & Update

Dear Ms Townsend and Members of the State Board:

VIA: Electronic Submission
Hardcopy if Requested

MAY 1 0 2011

SWRCB EXECUTIVE

The California Sportfishing Protection Alliance (CSPA) appreciates the chance to comment on the Draft Waste Discharge Requirements for Sanitary Sewer Systems and respectfully submits the following comments.

 The proposed General Order fails to regulate discharges under 25,000 gallons per day which in turn may result in significant degradation of water quality and will result in underreporting the presence of sewage in California's waterways.

The proposed Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General Order)(Finding 3) only regulates collection systems that have more than one mile of collection system and generate more than 25,000 gallons per day of sewage. Small systems, less than 25,000 gallons per day, present a potential to significantly impact water quality and degrade the beneficial uses of surface water.

a. A discharge of less than 25,000 gallons of raw sewage to an ephemeral or low flow stream could dominate the flow in the stream. As the General Order observes, raw sewage contains toxic and pathogenic substances, which would significantly impact the aquatic life, irrigated agriculture, drinking and domestic and recreational beneficial uses of the receiving stream.

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- b. A small community that produces less than 25,000 gallons per day of sewage may lack the resources to adequately maintain the sewage collection system.
- c. A small community that produces less than 25,000 gallons per day of sewage may not employ a certified wastewater treatment plant operator that would be present full time. Response time to a spill could therefore take several days.

In rural, foothill and mountain areas the public may have the perception that California's streams are pristine. Riparian water users may also share this perception. Riparian water users may use the stream water for drinking, domestic uses and for irrigation of their home gardens producing edible crops. These small streams are often home to sensitive aquatic life, such as trout.

It is not a secret that the Regional Boards have little resources dedicated to regulating small communities, especially those that discharge to land (non-15). Our review of Regional Board Waste Discharge Requirements also routinely shows a significant lack of discussion and regulation of the sewerage collection system. Coverage of these small systems under the General Order would at least require they have a plan to respond to sewer system spills, maintain adequate capability to employ a response and properly notify agencies and the public of the threat to beneficial uses of the stream. Failure to regulate these systems leaves the State Board's database regarding sewage spills incomplete with a potentially large segment of sewage spills going unreported. Since the State Board's sewage spill database is available to the public, water users downstream from small communities are deprived of a potentially valuable resource that could impact their wellbeing.

2. The proposed General Order attempts to mandate other permitting activities by the Regional Boards beyond the authority allowed in a Waste Discharge Requirement.

Finding No. 6 of the proposed General Order discusses combined sewer systems and requires the Regional Boards to incorporate reporting requirements into their Monitoring and Reporting Programs. The proposed General Order is not a state policy. A general Waste Discharge Requirement cannot be used to require actions by the Regional Boards. The State Board could issue a 13267 Technical Report requirement to owners of combined sewer systems to require reporting, otherwise Finding 6 appears meaningless.

3. The proposed General Order fails to prohibit discharges of raw sewage to land and leaves the Order likely unenforceable.

All discharges from collection systems that remain on land are only regulated with regard to nuisance. Nuisance is defined in the California Water Code (13050) as: "Nuisance means

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anything which meets all of the following requirements:

- a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- b. <u>Affects at the same time an entire community or neighborhood</u>, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- c. <u>Occurs during, or as a result of, the treatment or disposal of wastes.</u>" (Emphasis added)

A wastewater Discharger could reasonably argue that the transport of sewage in a collection system to a wastewater treatment plant occurs prior to treatment and disposal. It is also easily argued that most sewage discharges to land do not affect the entire community. For example, a sewage spill occurred in a shopping center parking lot and was contained in a relatively small area. While many shoppers unknowingly walked through the sewage, the community surrounding the shopping center was not directly impacted. Many sewage spills to land are limited to a single home site. Is this a nuisance? Such spills could be representative of a very large percentage of sewage discharges to land. What about a sewage spill to an urban farmer's field where he grows crops for direct ingestion?

The proposed General Order prohibits sewage discharges to surface waters. The proposed General Order (Prohibitions, page 10) however only prohibits discharges to land that result in a nuisance. The Regional Board's permits are more protective in that they prohibit any discharges that are not described in the Findings and the Findings do not describe design criteria for sewage spills. Collection systems should not designed to spill but to transport sewage to the designated treatment plant, with the exception for storage or equalization facilities. Many areas of California have very shallow groundwater and highly permeable soils. Discharges of untreated sewage to land threaten to degrade groundwater quality.

The General Order should be modified to prohibit any and all discharges from the collection system, including those to land. The discharge of untreated sewage to land threatens to degrade groundwater quality, to create a nuisance and threatens the public health. The State and Regional Boards have the authority to take enforcement actions and include limitations in permits for threatened violations (CWC 13304). The General Order should be revised to prohibit any sewer system overflow, both to surface waters and to land.

4. The proposed general Order fails to identify all of the potentially impacted beneficial uses of water from untreated sewage discharges.

Finding 21, page 5, identifies the beneficial uses that are most likely degraded by the discharge of raw sewage to land and surface water. The proposed General Order fails to identify irrigated agriculture and domestic uses. Raw sewage discharges would have a significant impact of irrigated land where food drops are grown, either commercially or for in home use. Equivalent levels of sewage treatment safe for food crop irrigation as required under CCR Title 22 include filtration and disinfection to achieve a disinfection level of 2.2 MPN/100 ml. Riparian water users are well documented as using surface waters for irrigating crops as well as in home domestic uses. Domestic uses are comparable to contact recreational uses with respect to the potential for illness from contact with raw sewage.

5. The proposed General Order acknowledges that surface water discharges will occur but does not implement the federal NPDES regulations.

The proposed General Order acknowledges in several areas that surface water discharges of raw sewage from wastewater collection systems will occur under the Order. Even though the proposed General Order prohibits discharges of sewage to surface water, the Order acknowledges that they will continue and the Order's goal is simply a reduction in the numbers not complete elimination. CWC Section 13376 requires that: "Any person discharging pollutants or proposing to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or any person discharging dredged or fill material or proposing to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of the discharge..." The NPDES regulations are extensive and require the development of numerous discharge limitations all of which are absent from the proposed General Order. The proposed General Order does not appear to comply with CWC 13376 or federal regulations.

6. The proposed general Order should require immediate compliance for all enrollees.

The proposed General Order contains a compliance time schedule for new enrollees to achieve compliance with the requirements of the Order. The existing General order was adopted in 2006, five years ago. Since collection systems owners were required to seek coverage or obtain individual collection system permits, any further compliance schedules should be eliminated and immediate compliance should be required.

7. The proposed General Order does not require certification by a technically qualified and experienced person.

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The proposed General Order, Finding 16, suggests that a technically qualified and experienced person certify the required sewer system maintenance plan. Yet, the Order only requires certification by the responsible party. Certification by a technically qualified and experienced person should be a requirement not a suggestion.

8. The proposed General Order contains inadequate public notification.

The proposed General Order, page 14, lists the "chain of communication for reporting SSOs". While not cited, it is assumed that State Board staff is relying on the California Emergency Management Agency to inform the California Department of Fish and Game, a first responder, downstream water purveyors and the public. Cal EMA notifications are frequently made via FAX and can be received by appropriate staff late; the public and downstream users are rarely notified of sewer spills. Posting of streams and waterways is rarely done to warn the unknowing public. Downstream water rights holders (domestic, drinking water, food crop irrigation) are also rarely notified of upstream sewer spills. Many wastewater Dischargers have the technical capability to implement automated calling to inform designated parties of an emergency via a recorded message. The General Order should correct the decades old deficiencies in reporting raw sewage discharges. The Center for Disease Control (CDC) estimates that most illnesses from contact with sewage go unreported. The Discharger should be required to develop and maintain a list of all downstream water right holders and provide notification of any spills that could impact their use of water. All downstream surface water access points should be properly signed to inform the public of unhealthy conditions for as long as a threat exists or is uncertain. As a first responder, the California Department of Fish and Game should be notified by the Discharger as soon as is possible of any and all sewage spills to surface waters. The proposed General Order appears to indicate that past practices for sewage spill reporting has been unacceptable. The General Order, while setting up a database, does little more to correct the past reporting deficiencies. The public has a right to know, notification and posting is not overly burdensome but should be considered a minimum standard for reporting sewage spills.

9. The General Order's list of illicit discharges should be expanded.

The General Order's (Legal Authority, page 14) list of illicit discharges should be expanded to include roof and floor drains, sump and/or pumps systems from basements or low lying areas and yard drainage. These are some of the most common inflow sources. Manhole covers should be secured to prevent opening to provide flood relief.

10. The General Order requires that the design criteria shall be specified by the Discharger but fails to require a minimally accepted standard.

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The design capacity for sanitary sewers is fairly well defined in civil engineering design manuals for prescribed sources. An allowance for potential I/I in new systems and estimating I/I levels for existing sources can be more discretionary. Many collection systems cross streams and rivers and many are constructed within streambeds. The proposed General Order should establish a minimum standard for California to ensure consistency. At a minimum, the general Order should require that pumping stations be constructed outside the 100-year floodplain and protected against inundation and washout from the 100-year storm event.

11. The proposed General Order's Operations and Maintenance Program is deficient and a requirement for identification and enforcement against illicit discharges could not be located.

The Rehabilitation and Replacement section of the Operations and Maintenance Program only addresses replacement of pipes. Pump Stations and manholes also need rehabilitation and replacement and should be prioritized along with sewer pipes.

A program for identification and elimination of illegal discharges could not be located. Illegal connections to the sewer system are at least as important to reducing I/I as are broken sewer lines. A program for smoke and pressure testing could not be located, the principal means of identifying illicit discharges. Reduction of I/I will not be successful without identification and elimination of inflow sources. Inflow sources are also responsible for the significant peak flows observed in many collection systems and one of the most common causes of collection system overflows.

12. The Fats, Oils and Grease (FOG) Program should be required of all dischargers.

The Central Valley Regional Board has stopped including Effluent Limitations for oil and grease in their NPDES permits based on the success of the General Order FOG program, although we can find no evaluation of the program. The proposed General Order allows a Discharger to opt out of the program if they don't believe it's necessary with submittal to an unidentified entity of justification. Virtually all communities have restaurants, gas stations residential areas that produce oil and grease. Cooking oils and grease have not been discussed as compared to significantly more toxic petroleum based oils and grease.

13. The proposed General Order, Overflow Emergency Response Plan, discusses accelerated or additional monitoring however none appears to be required by the Order.

Monitoring for all constituents that cause or contribute to degradation of a receiving water beneficial use should be monitored upstream and downstream of the discharge and within the CSPA Comments: SSS WDRs Review & Update. 10 May 2011, page 7 of 10.

discharge itself. Without monitoring, enforcement can only be minimal based on violation of the discharge prohibition. It is the stated purpose of the General Order to determine the impacts sanitary sewer system overflows have on water quality; this purpose cannot be fulfilled without comprehensive monitoring. What beneficial uses have been degraded and for how long should be questions addressed by monitoring of the regulated sewer spills.

14. The proposed General Order is deficient in requiring an evaluation of the collection system.

The System Evaluation and Capacity Assurance Plan only requires evaluation of portions of the system causing or contributing to discharges. Without a system wide evaluation one cannot know what sections of the system are contributing to the problem. In any case, even if one portion of a collection system is running fairly well, it should be included in the process to schedule maintenance. This is also important to evaluate the capacity for additional hookups and increases in industrial discharges.

Pump stations also need to be evaluated. Do all pump stations have backup and redundant pumps and emergency power supplies capable of full replacement? Is there sufficient wet well storage capacity for design flows and I/I? Do all pump stations have high water alarms with automated emergency notification? Are the alarm times sufficient for response? In rural areas response time can be quite long; alarm settings should reflect a maximum response time. Backup power supplies should be routinely tested.

15. The notification requirements should be expanded for submittal of Incomplete Reports.

The General Order should be amended to require notification of all and any interested parties rather than only a simple update of the online database for "incomplete reports."

16. The reporting requirements for sewage spills in the Monitoring and Reporting Program are grossly inadequate.

The California Emergency Management Agency must be notified within two hours of a sewage spill. The proposed General Order's Monitoring and Reporting Program requires a minimum reporting time of three days for category 1 spills, 30 days for category 2 spills and almost two months for known discharges from privately owned laterals. The proposed General Orders reporting times make the data useless for any purpose other than data generation and analysis.

The General Order states that state and regional Water Board employees are not first responders, however any enforcement response must be made while the discharge is occurring; which is not

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possible under the General Orders reporting time frames. Samples cannot be collected by the regulatory agency under this timeframe. Observations of the stream conditions cannot be made under this timeframe; toilet paper, condoms and fecal matter should be removed or washed away within three days. An evaluation of the responsible party's response cannot be made under this timeframe. An observation of a fish kill cannot be made under this timeframe. An observation of swimmers cannot be made under this timeframe. An observation of stream posting and public notification cannot be made under this timeframe. An observation of food crop irrigation activities cannot be made under this timeframe.

The General Order claims that the State SSO database is available to the public, but with two-month-old data it would be of little value. My child got sick from swimming in the local creek; could it have been sewage? There is a terrible odor near my house; could it be sewage? All the fish are dead in the local creek; could it be sewage? Don't bother to look to the State Board for answers.

There is no assessment that adequately responsive 2 hour reporting to the States SSO database would provide any burden that outweighs the notification of regulatory staff and the public of sewer spills.

17. Issues from collection system odors appear to be ignored by the proposed General Order.

Odors from sewage collection system are well documented. Odors can be a nuisance as defined under the CWC. We could find no requirement in the General Order for odor control or assessment or reporting.

18. Flow measurement requirements are critical to evaluating the collection system but appear to be absent from the general Order.

Flow measurement devises should be required full time at each pump station and should be used during investigation of gravity sections to determine operating conditions and contributory flows from each section of the collection system. Flow recording devices must be capable of recording time verses flow rates to determine peaking factors. All equipment should be protected from damage from a 100 year flood and be accessible during flood events.

19. The proposed General Order could lead to confusion in Regional Board issued NPDES permits where the flow rate exceeds one million gallons per day and federally mandated pretreatment collection system conditions apply.

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Domestic Wastewater Treatment Plants with a flow rate greater than 1 mgd are required by federal regulation to implement an Industrial Pretreatment Program. The Industrial Pretreatment Program regulations contain numerous requirements regarding what may and may not be discharged into sanitary sewer collection systems. The proposed general Order does not contain the minimum requirements to comply with the federal pretreatment regulation. The individual NPDES permits would therefore need to continue to include language requiring compliance with the pretreatment regulations; the collection system would therefore be regulated under both the individual NPDES permit and the General Order which could lead to confusion. Including the mandated pretreatment language in the General Order could eliminate such confusion. It must also be noted that wastewater treatment plant collection systems with flow rates below 1 mgd would also benefit from the pretreatment collection system requirements as they are designed to protect the system. The collection system requirements from the federal regulations are as follows:

The federal regulations, 40 CFR 403.5 require that:

"The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system, where incompatible wastes are:

- Wastes which create a fire or explosion hazard in the treatment works;
- b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0, unless the works is specially designed to accommodate such wastes;
- Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation or treatment works;
- d. Any waste, including oxygen demanding pollutants (BOD, etc.), released in such volume or strength as to cause inhibition or disruption in the treatment works, and subsequent treatment process upset and loss of treatment efficiency;
- e. Heat in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40°C (104°F), unless the Regional Board approves alternate temperature limits;
- f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

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- g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems; and
- Any trucked or hauled pollutants, except at points predesignated by the Discharger.

The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the legal authorities, programs, and controls necessary to ensure that indirect discharges do not introduce pollutants into the sewerage system that, either alone or in conjunction with a discharge or discharges from other sources:

- a. Flow through the system to the receiving water in quantities or concentrations that cause a violation of this Order, or
- b. Inhibit or disrupt treatment processes, treatment system operations, or sludge processes, use, or disposal and either cause a violation of this Order or prevent sludge use or disposal in accordance with this Order."

Thank you for considering these comments. If you have questions or require clarification, please don't hesitate to contact us.

Sincerely,

Bill Jennings, Executive Director

California Sportfishing Protection Alliance