

## **Response to Comments** **City of Healdsburg Tentative Order No. R1-2010-0034**

*Comment letters on the draft NPDES permit (Order No. R1-2010-0034) for the City of Healdsburg Wastewater Treatment Facility were received from:*

- A. City of Healdsburg (letter signed by Jim Flugum), April 23, 2010
- B. City of Santa Rosa (letter signed by Miles Ferris), April 22, 2010
- C. California WaterReuse (letter signed by Dave Smith), April 22, 2010
- D. Clean Water Coalition of Northern Sonoma County (letter signed by Fred Corson), April 23, 2010
- E. Russian Riverkeeper (letter signed by Don McEnhill), April 23, 2010
- F. Westside Association to Save Agriculture (letter signed by Marc Bommersbach), April 23, 2010
- G. Russian River Watershed Protection Committee (letter signed by Brenda Adelman), April 23, 2010 email

*This document provides Regional Water Board staff responses to comments provided by each commenter. The responses indicate whether or not changes were made to the permit in response to the comment.*

### **City of Healdsburg**

*The following are responses to comments submitted by the City of Healdsburg to the Regional Water Board in a letter dated April 23, 2010. The City of Healdsburg identified two major areas of concern: the application of the "tributary statement" to assign to the Basalt Pond all beneficial uses and accompanying discharge prohibitions applicable to the Russian River (Comments A through F) and the addition of extensive recycled water requirements. Other comments identified errata, requested clarification, or requested minor changes to the Proposed Permit.*

**Comment A:** The Discharger is concerned that water quality objectives in the Basin Plan for the upstream portion of the Russian River are invalid because they were not adopted in accordance with Water Code Section 13241. The Discharger is specifically concerned about water quality objectives for total dissolved solids (TDS) and specific conductance (SC) for the upstream portion of the Russian River. The Discharger states that there is no evidence in the Basin Plan that these water quality objectives are designed to protect certain beneficial uses and provides data to demonstrate that the Russian River and potable water in the area do not comply with the proposed water quality objectives for TDS and SC. The Discharger requests that the Regional Water Board revise the water quality objectives in the Basin Plan for TDS and SC to comply with Water Code section 13241 and to reflect levels reasonably necessary to protect beneficial uses.

**Response:** Challenges to the water quality objectives for the upstream portion of the Russian River in Table 3-1 of the Basin Plan are untimely.

The water quality objectives in Table 3-1 for the portion of the Russian River upstream from the Laguna de Santa Rosa were created to protect both the existing and potential

beneficial uses of the Russian River, as identified in Table 2-1.<sup>1</sup> These criteria were adopted by the Regional Water Board in 1975 and approved by both the State Water Resources Control Board and the U.S. EPA. The assumption is that the Regional Water Board, the State Water Board and the U.S. EPA all acted in conformance with the requirements of the Clean Water Act and the Porter-Cologne Water Quality Act and that these site-specific criteria were adopted to protect existing and/or potential beneficial uses. If the Discharger believes that these site-specific criteria should be changed because the beneficial uses that they were meant to protect are either no longer appropriate or the Discharger has new information regarding the water quality objectives necessary to protect the existing and potential beneficial uses, it can request that the Regional Water Board amend the Basin Plan. (SWRCB Order WQO 2002-0015, p. 13 (stating that basin plan amendment is appropriate vehicle to dedesignate uses.)) If the Regional Water Board chooses to amend the Basin Plan to change the site-specific water quality objectives for the Russian River, it would reconsider the factors set forth in Water Code section 13241 at that time. Even if the Discharger could demonstrate that those factors were not properly considered as part of the original adoption, it is too late for such a challenge at this time.

No changes were made to the Proposed Permit in response to this comment.

**Comment B:** The Discharger asserts that the Proposed Permit does not demonstrate that the Regional Water Board adequately considered factors under Water Code section 13241 when adopting the receiving water limitations in Sections V.A.3 and V.A.4, which the Discharger alleges are more stringent than required by the Clean Water Act because they are not reasonably necessary to protect the beneficial uses in Basalt Pond.

**Response:** It is not necessary for the Regional Water Board to consider the factors under Water Code section 13241 before adopting the receiving water limitations in Sections V.A.3 and V.A.4 of the Proposed Permit. These water quality objectives do not exceed the requirements of federal law. As explained in the Fact Sheet for the Proposed Permit, the water quality objectives for the Russian River hydrologic unit, which includes Basalt Pond, were approved pursuant to federal law, and are, therefore, the applicable federal water quality standards under 40 CFR 131.21(c)(2), and are no more stringent than required to implement the requirements of the Clean Water Act. In this Proposed Permit, the only requirements that exceed the requirements of the federal Clean Water Act are those that apply solely to the land discharge. Nonetheless, as set forth in section IV.D.3 of the Fact Sheet, the Regional Water Board did consider the requirements set forth in Water Code section 13263, including the factors set forth in Water Code section 13241. In addition, the Regional Water Board is willing to consider any additional information that the Discharger would like to provide in regards to those factors.

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<sup>1</sup> The Basin Plan notes that existing beneficial uses for waterbodies are those uses that were attained in a waterbody on or after November 28, 1975, the date of the first Water Quality Standards Regulation published by U.S. EPA (40 CFR 131.3(e).)

No changes were made to the Proposed Permit in response to this comment.

**Comments C.1 and C.2:** The Discharger is concerned that the Proposed Permit improperly assigns the beneficial uses applicable to the Russian River to Basalt Pond based on the Discharger's assertion that Basalt Pond is not a tributary of the Russian River and even if the tributary statement applies, the Regional Water Board improperly applied it to Basalt Pond.

**Response:** The Proposed Permit identifies Basalt Pond as being part of the Russian River, and does not identify it as a tributary of the Russian River. The Regional Water Board and the City of Healdsburg reached this conclusion after discussions regarding how to determine compliance with the Basin Plan's requirement that discharges to the Russian River during the discharge period do not exceed 1% of the river's flow. Proposed Permit section II.B and Fact Sheet section II.B clearly describe the evidence that supports the conclusion that Basalt Pond is part of the Russian River, including the fact that there is a surface connection when the Russian River flows into Basalt Pond during extremely high flow conditions. Similarly, there is evidence of subterranean stream (underflow) flows between the river and Basalt Pond. The Basin Plan clearly states that subterranean streams are not ground water, and have all of the beneficial uses of the surface waters. (Basin Plan at 2-18.00, f.n. 3.) Regional Water Board staff has also received a permit application from the owner of the Basalt Pond, Syar Industries, who is proposing to construct flow channels between Basalt Pond and the Russian River. This will allow flows from the Russian River to directly mix with water in Basalt Pond on a regular basis. It is, therefore, well established that Basalt Pond is part of the Russian River, and as such, the beneficial uses of the Russian River apply to Basalt Pond. (40 CFR 131.10(b) (requiring that in designating uses of water body and identifying appropriate criteria for those uses, consideration must be taken to ensure downstream uses are protected).) In addition, if Basalt Pond had no connection to the Russian River, then it would be a surface fresh water impoundment and the Basin Plan prohibits all discharges to surface freshwater impoundments (Basin Plan at 4-1.00 (Chapter 4, Implementation Plans, Point Source Measures, Waste Discharge Prohibitions, North Coastal Basin, Prohibition 1).)

No changes were made to the Proposed Permit in response to this comment.

**Comment D:** The Discharger is concerned that the Proposed Permit improperly applies North Coastal Basin Discharge Prohibition No. 4 in the Basin Plan to Basalt Pond. The Discharger states that Basalt Pond is not a tributary to the Russian River for purposes of the Basin Plan.

**Response:** The seasonal discharge prohibition/one-percent flow limitation is applicable to Basalt Pond because Basalt Pond is part of the Russian River. See discussion in response to Comments C.1 and C.2.

No changes were made to the Proposed Permit in response to this comment.

**Comment E:** The Discharger is concerned that the Proposed Permit improperly applies the water quality objectives in the Basin Plan for the upstream portion of the Russian River to Basalt Pond and expresses specific concern regarding Surface Water Limitations 3 (specific conductance) and 4 (total dissolved solids), which are based on water quality objectives in the Basin Plan for the “mainstem river upstream of its confluence with Laguna de Santa Rosa”. The Discharger argues that Basalt Pond is not part of the mainstem river, nor is it a tributary to the Russian River and concludes that the Basin Plan water quality objectives for TDS and SC do not apply to Basalt Pond and are invalid.

**Response:** See responses to Comments A, B, C and K.3.

**Comment F:** The Discharger states that Discharge Prohibition III.E in the Proposed Permit is unnecessarily more stringent than required by State law and that there is no reason to suspect that any discharges to land would impact groundwater since any such discharges would be to paved surfaces and would be captured immediately.

**Response:** Prohibition III.E of the Proposed Permit is standard language in all permits adopted by the North Coast Regional Water Board since the State Water Board adopted Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems and, as stated in the Fact Sheet, is stricter than the sanitary sewer overflow (SSO) prohibition in the Statewide General WDRs for Sanitary Sewer Systems in that it extends the prohibition beyond discharges to waters of the U.S. Prohibition III.E prohibits the discharge of untreated or partially treated wastewater that results from an SSO to waters of the State, groundwater, or land and that creates pollution, contamination, or nuisance as defined in section 13050(m) of the Water Code. The prohibition is consistent with the State’s antidegradation policy because it imposes conditions to prevent impacts to existing high quality groundwater, which is often relied upon in the Region as a drinking source. The prohibition also addresses impacts to public health and creation of a public nuisance.

Regional Water Board staff does not agree with the Discharger’s claim that SSOs are always to paved surfaces and captured immediately. Although many SSOs reported by the Discharger in recent years have been small SSOs to paved areas that are captured before entering a storm drain, SSOs of any size have the potential to discharge to storm drains and surface waters, impact public health, and/or create a public nuisance.

No changes were made to the Proposed Permit in response to this comment.

**Comment G:** The Discharger asserts that Groundwater Limitation V.B1 violates substantive due process because “it is a vague narrative provision” because it does not define “statistically significant”; does not provide the Discharger with any other means of knowing how to control the collection, storage, and use of wastewater or recycled water to comply with the groundwater limitation; and does not contain any standards for

determining compliance, therefore encouraging arbitrary enforcement in violation of due process.

**Response:** The Regional Water Board disagrees that Groundwater Limitation V.B.1.a is “a vague narrative provision.” The measurement of significant difference using statistical methods is well established. Measurably significant is defined in section 20164 of Title 27 as a change in the monitoring point data that, relative to the reference background value (or other approved reference value or distribution), is sufficient to indicate that a release has occurred, pursuant to the applicable data analysis method (including its corresponding trigger). Title 27 section 20415(e)(8) prescribes the acceptable statistical methods that may be used: parametric ANOVA, nonparametric ANOVA, a tolerance interval procedure, a control chart approach, or other statistical method that can verify whether there is measurably significant evidence of a release. The Proposed Permit does not provide the Discharger with the means of compliance with this requirement, as Water Code section 13360 prohibits waste discharge requirements from specifying “the design, location, type of construction or particular manner in which compliance may be had...,” allowing the Discharger to comply in any lawful manner.

No changes were made to the Proposed Permit in response to this comment.

**Comments H and K.6(e), K.7.(a), K.7.(c), and K.7.(g):** The Discharger requests modifications to the Proposed Permit to remove references to dual-plumbed system requirements, cross-connection requirements and regulatory approval of the recycled water engineering report.

**Response:** The Discharger is correct that Title 22 regulations related to the recycled water engineering report submittal require approval by the regulatory agency for dual-plumbed systems, but do not have an explicit approval requirement for non-dual-plumbed systems. Regional Water Board staff modified the language in Finding A.6 in Attachment G to be consistent with the language in section 60323 of Title 22 and requirements in the Landscape Irrigation General Permit, which only require submittal of the engineering report.

The recycled water language in the Proposed Permit was prepared with the intent of it being applicable to a broad number of recycled water uses. Regional Water Board staff recognizes that not every master water recycler will have every type of use identified in Title 22. The broad language also provides some flexibility to each discharger as they seek to add uses after permit adoption.

Recycled water language referencing dual-plumbed system requirements has been kept in the Proposed Permit with some modification to indicate that these requirements are to be adhered to “if applicable”. A new paragraph explaining this rationale was added to Section IV.G.4 (last paragraph) of the Proposed Permit. Permit language was modified in Attachment E (Monitoring and Reporting Program), section X.D.ii.d. and Attachment G, Water Reclamation Provisions C.3, C.7, C.8 and C.9.

**Comment I:** The Discharger asserts that the reclamation requirements in the Proposed Permit are inconsistent with Water Code section 13523.1 because they incorporated the landscape irrigation provisions from the State Recycled Water Policy and the Landscape General Permit, and the Regional Water Board did not tailor requirements specific to the Discharger's project.

**Response:** The Regional Water Board disagrees with the Discharger's contention that the Master Reclamation Permit for landscape irrigation use cannot properly rely on the requirements set forth in the State's Recycled Water Policy and the Landscape General Permit. The intent of Water Code section 13523.1 is to set permit conditions for master reclamation permits, not to limit Regional Water Boards from considering and relying on policies and requirements established by agencies, such as the State Water Board, for specific uses of reclaimed water. The Recycled Water Policy and the Landscape General Permit were products of extensive stakeholder input and, as such, balance the state's desire to expand the use of recycled water while ensuring protection of water quality and public health. The regional water boards are expected to establish in their waste discharge requirements for reclaimed water use criteria consistent with the State's Recycled Water Policy and the Landscape General Permit. In addition, other sections of the Water Code, including, but not limited to sections 13260 and 13267, allow the Regional Water Board to establish in waste discharge requirements, prohibitions, effluent limitations, and provisions that are necessary for the protection of water quality.

No changes were made to the Proposed Permit in response to this comment.

**Comment J:** The Discharger asserts that the nutrient loading provisions in the Proposed Permit are inconsistent with the Regional Water Board's finding in section V.B.4 of the Fact Sheet that discharges to authorized reclamation sites are not expected to cause exceedances of water quality objectives.

**Response:** The monitoring and reporting requirements requiring documentation for nitrogen loading from all sources is necessary for the protection of water quality. The finding from section V.B.4 of the Fact Sheet was not specific to the application of recycled water and was only cited for the contention that discharges to the Basalt Pond do not appear to be affecting groundwater quality. As the Discharger notes, these groundwater monitoring results took place prior to the operation of the new treatment plant and did not involve discharges to land.

As the State Water Board recognized in its Recycled Water Policy and Landscape General Permit, nitrogen is one of the major concerns with the use of reclaimed water for irrigation. Regional Water Board staff made the finding that discharges to authorized reclamation sites are not expected to cause exceedances of water quality objectives based not only on the relatively low levels of total nitrogen in the recycled water, but also on the presumption that the Discharger will utilize agronomic rates for reclamation and adhere to permit conditions. Without the development of information regarding

nitrogen loading by recycled water users, there is no way to conclusively demonstrate that water quality is being protected. Information that needs to be submitted is not onerous, but rather requires calculations of the amount of water and nutrients that will be applied in comparison to water and nutrient demand of the crop or vegetation being irrigated and BMPs that will be implemented to ensure water quality protection. Such a requirement is consistent with Water Code 13523.1, which requires that purveyors of reclaimed water establish and enforce rules or regulations for its reclaimed water users governing the use of reclaimed water.

The Recycled Water Policy, drafted by stakeholder interests, includes criteria for the preparation of salt and nutrient management plans for all groundwater basins in California. The Policy identifies an approach where implementation measures are used for recycled water application sites with the understanding that site-by-site groundwater monitoring is not needed. This Proposed Permit incorporates requirements that are focused on appropriate site conditions and reclaimed water irrigation practices and does not include site-specific monitoring, nor does it include requirements for the City to prepare detailed basin-wide salt and nutrient management plans. The Regional Water Board believes that this requirement is consistent with the State Water Board requirement for salt and nutrient management plans for all groundwater basins.

No changes were made to the Proposed Permit in response to this comment.

**Comment K.1 and K.6.c:** The Discharger requests modification to the description of the treatment facility and the solids handling process in section II.B of the Proposed Permit and in section II.A of the Fact Sheet.

**Response:** The Facility Description in section II.B of the Proposed Permit has been revised to include the requested statement regarding the treatment facility which reads:

“The plant headworks can accept instantaneous flow rates up to 9.6 mgd. Inflows greater than 4.0 mgd are automatically diverted to the equalization basin. During periods of lower inflows, the stored water is returned to the headworks and delivered to the wastewater treatment plant for full treatment and disinfection.”

The Solids Handling Process description in section II.B of the Proposed Permit and section II.A of the Fact Sheet has been revised as requested. The language in the public review draft has been deleted and replaced by the following: “The City uses a proprietary solids removal and digestion process that combines aerobic and anaerobic processes. Solids are periodically removed from the biological process and transferred to two digester tanks, referred to as interchange reactors. Transfer to the interchange reactors occurs in a daily decant/fill process, where decanted clear liquid from the interchange reactors is returned to the biological process, and the volume decanted is replaced with solids from the biological process. All solids transferred from the biological process to the interchange tanks are first passed through a 250 micron rotary drum screen to remove inert non-biodegradable material, which is compacted and conveyed to a separate dumpster. In the final solids removal step, digested solids are

pumped from the interchange reactor tanks, dosed with polymer for thickening, and then dewatered in a centrifuge and conveyed to a dumpster. Dewatered solids are hauled for landfill disposal to the Redwood Landfill in Marin County.”

**Comments K.2 and K.5.(e):** The Discharger’s UV disinfection system is designed for the low-turbidity water produced by membrane filtration with a minimum transmittance of 65%. The correct value for dose rate should be 80 millijoules/cm<sup>2</sup>.

**Response:** Section IV.D.2.c of the Proposed Permit and section IX.B.2 of the Monitoring and Reporting Program (Attachment E of Proposed Permit) have been modified to provide the correct transmittance and UV dose rate.

**Comment K.3:** The Discharger asserts that all receiving water limitations have been improperly applied. If they are not removed, the Discharger requests, at a minimum, the following changes to the wording in the limitations.

- (a) Receiving water limits for TDS and SC should be removed until more information and data can be collected on appropriate receiving water limits in these circumstances.
- (b) If a receiving water limitation for temperature remains in the Proposed Permit, it should be revised to be consistent with the language in the Basin Plan Water Quality Objectives, which allows for 5°F change from natural receiving water temperature. The Discharger further requests that only the warm water temperature limitation be applied, considering the lack of any observed cold water fishery in Basalt Pond.

**Response:** See response to Comment A regarding the applicability and validity of receiving water limitations.

Receiving water limitations for TDS and SC have not been removed from the Proposed Permit. The receiving water limitations for these two constituents are based on Table 3-1 of the Basin Plan and only a basin plan amendment could be used to change the water quality objectives in Table 3-1 or dedesignate beneficial uses for Basalt Pond. (SWRCB Order WQO 2002-0015, p. 13 (stating that basin plan amendment is appropriate vehicle to dedesignate uses.)) However, because there is data that suggests these limits may exceed natural background water quality in the Basalt Pond, compliance monitoring requirements for TDS and SC have been removed from the Monitoring and Reporting Program (Attachment E of Proposed Permit). To require the Discharger to meet these receiving water limitations in Basalt Pond if natural background conditions already exceed the limitations set forth in Basin Plan Table 3-1 would be unfair. To determine if the natural background water quality of Basalt Pond exceeds the TDS and SC levels in Table 3-1, the Proposed Permit includes Provision VI.C.2.c, which requires the Discharger to conduct a special study comparing the water quality of Basalt Pond with the water quality of a nearby abandoned gravel extraction pond. This study will help determine natural background concentrations of TDS and SC and the results of the study will be used to create a long-term monitoring program for Basalt Pond with regard to these and other constituents.

The Basin Plan clearly states that the natural receiving water temperature of intrastate receiving waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. The Regional Water Board has not received any documentation from the Discharger to demonstrate that alterations in temperature would not adversely affect beneficial uses, nor that the cold water beneficial use does not exist in Basalt Pond. The City of Santa Rosa was granted some variation in the temperature receiving water limitation in its permit because it conducted studies and submitted technical information to demonstrate that discharges to receiving waters could vary by up to 5°F without adversely affecting beneficial uses.

No changes were made to the Proposed Permit in response to this comment.

**Comment K.4:** The Discharger appreciates the provision in section VI.C.1.e of the Proposed Permit that allows the Regional Water Board to reopen the permit if the Discharger performs studies to determine site-specific water effects ratios and/or site-specific dissolved-to-total metal translators.

**Response:** Comment noted. No changes were made to the Proposed Permit in response to this comment.

**Comment K.5.(a):** The Discharger requests that the frequency of sampling for acute toxicity be reduced from monthly to quarterly, based on the fact that toxicity has not been detected in any of the acute or chronic tests conducted on effluent from the advanced treatment process. If the Regional Water Board needs more data to justify this reduction in monitoring frequency, the Discharger further requests that a footnote be added to Table E-4 requiring continued monthly monitoring during the first year of the permit with reduction to quarterly monitoring if all sample results show at least 90% survival.

**Response:** Acute toxicity provides a means of screening effluent for the aggregate effect of a mixture of pollutants in the effluent. It is a relatively inexpensive means of testing the effluent to assess whether or not the effluent is exerting toxic effects, without requiring frequent scans for specific pollutants that exert toxicity. The Discharger's current permit requires annual acute toxicity monitoring, therefore, only two acute toxicity tests have been conducted since the upgraded plant began operation. The Monitoring and Reporting Program in Attachment E of the Proposed Permit has been modified to allow for a reduction of the acute toxicity monitoring frequency to quarterly after the first year, if all 12 monthly acute toxicity results collected have 90 percent survival or greater.

**Comment K.5.(b):** The Discharger requests that language relating to acute and chronic toxicity testing be modified to provide clarity related to test species, sample collection timing, and test procedures.

**Response:** Requested changes have been made to sections V.A.1, V.A.2, and V.B.1 of the Monitoring and Reporting Program in Attachment E of the Proposed Permit because the changes provide clarity and correct an error. Section V.A.3 and V.B.3 have not been changed.

**Comment K.5.(c):** Two of the subsections within section V.C of the Monitoring and Reporting Program (Attachment E of Proposed Permit) are improperly numbered.

**Response:** The numbering error has been corrected.

**Comment K.5.(d):** The Discharger requests clarification in the Monitoring and Reporting Program (Attachment E of Proposed Permit) that monitoring conducted for monitoring location EFF-001 can be used to establish effluent quality for REC-001 when wastewater is being discharged to the storage pond.

**Response:** Staff understands the Discharger to be requesting a footnote in “Table E-5. Reclamation Monitoring Requirements – REC-001” clarifying that monitoring conducted for EFF-001 may be used for compliance with reclamation monitoring requirements. Footnote 1 to Table E-2, Monitoring Station Locations, provides this clarification, thus no change was made to the Proposed Permit in response to this comment.

**Comment K.5.(f):** The Discharger currently notifies and reports on spills in accordance with a May 27, 2007 memorandum from the Regional Water Board titled “Spill Reporting Procedures, Mandatory Procedures and Requirements for Addressing Spills and Other Unauthorized Discharges from Your Agency’s Wastewater Collection, Treatment and Disposal Facilities”. The Discharger understands the May 2007 Memorandum to be the currently applicable procedure, applies to all spills regardless of size. The notification procedures in the current Proposed Permit, however, distinguish between spills above and below 1,000 gallons. To avoid confusion and avoid reporting errors, the Discharge suggests that the Spills and Overflows Notification section of the Proposed Permit be modified to be consistent with the May 2007 memorandum.

**Response:** Regional Water Board staff recently modified spill reporting language to include different written reporting requirements based on the nature of the spill. All spills are held to the two hour reporting limit of the Statewide General WDRs for Sanitary Sewer Systems. In addition, larger spills (greater than 1000 gallons) and those that reach surface waters are required to provide a written report within five business days, while smaller spills (less than 1000 gallons) and those that do not reach a surface water are required to provide the written report with the monthly monitoring report. This new language will replace the requirements spelled out in the Regional Water Board Memorandum titled “Spill Reporting Procedures, Mandatory Procedures and Requirements for Addressing Spills and Other Unauthorized Discharges from Your Agency’s Wastewater Collection, Treatment and Disposal Facilities” for each discharger as the new language is adopted into permits. No changes were made to the Proposed Permit in response to this comment.

**Comment K.6(a):** The Magnolia Lift Station underwent a major electrical upgrade in 2006, and the lift station now includes a total of four 50 horsepower dry-pit pumps. The discussion in section II.A of the Fact Sheet should be revised accordingly.

**Response:** Section II.A of the Fact Sheet has been revised to identify that the Magnolia Lift Station has four, not three, 50 HP dry-pit pumps.

**Comment K.6(b):** The Discharger requests that Fact Sheet section II.A, Description of Wastewater and Biosolids Treatment or Controls, Wastewater Treatment be modified to include an additional sentence to clarify that the headworks structure is sized to accommodate peak inflow spikes of up to 9.6 mgd.

**Response:** Section II.A of the Fact Sheet has been modified as requested.

**Comment K.6(d):** The Discharger requests that Table F.3. "Historic Effluent Limitations and Monitoring Data" be modified to include a clarifying note in the heading. The Discharger is concerned because the current table represents effluent quality before and after the advanced wastewater treatment plant began operating. The Discharger wishes to avoid any confusion or misinterpretation of the data in the table.

**Response:** The requested note clarifying that advanced wastewater treatment began on May 1, 2008 has been added to Table F.3. In addition, section II.D of the Fact Sheet contains a statement regarding the limited number of violations that have occurred since the advanced wastewater treatment plant began operating. Fact Sheet section II.D has been modified to place the discussion of compliance since the advanced wastewater treatment plant came on-line in a separate paragraph in order to emphasize the limited number of effluent limitation violations that have occurred since the new WWTF began operating. In addition, this section of the Fact Sheet has been modified to identify that copper concentrations exceeded copper effluent limitations in January and February 2010.

**Comment K.6(f):** The Discharger supports the finding that the discharges from the wastewater treatment plant do not have a reasonable potential to cause or contribute to exceedances of applicable water quality for nitrate in the receiving water. The Discharger also provided additional nitrate results that have been obtained since the report of waste discharge was submitted.

**Response:** Staff notes the Discharger's support of this finding and appreciates the additional data. The finding is based on a review of applicable effluent data from the facility combined with the requirements contained in the draft permit. No changes were made to the Proposed Permit in response to this comment.

**Comment K.6(g):** The Discharger is concerned that many of the provisions in Attachment G of the Proposed Permit are unnecessary and go well beyond what is necessary to support the finding in section IV.D.2 (Satisfaction of Antidegradation Policy) and present a disincentive to the voluntary use of recycled water. The

Discharger proposes that the rationale used to support “Groundwater Receiving Water Limitations” be used to support the finding that the discharge of recycled water to land will not result in degradation to surface or groundwater.

**Response:** The recycled water requirements and management measures in Attachment G are the basis for the Regional Water Board’s finding that the discharge of recycled water to land will not result in degradation to surface or groundwater. The finding proposed by the Discharger from the “Groundwater Receiving Water Limitations” section is inappropriate because it was only made in the context of discharges to Basalt Pond.

**Comment K.6.(h):** The Discharger takes exception to the statement in section IV.G.1, Reclamation Specifications, Scope and Authority that says “the Discharger did not submit any evidence regarding whether the waste discharge requirements for reclamation discharges would interfere with the development of needed housing within the region or the costs of compliance, particularly anything to show that the costs of compliance with the Order would be unmanageable.” The Discharger states that it did not anticipate the level of reclamation requirements, thus did not know that such evidence would be needed.

**Response:** The Discharger may submit additional information in regard to this issue for the Regional Water Board’s consideration. Due to the fact that the hearing for this item is less than one month away, it is possible that this could postpone adoption of the Proposed Permit. Any such financial analysis should include cost savings realized due to the incorporation of standard recycled water language (no groundwater monitoring and analysis, incidental runoff allowance, streamlined salt/nutrient management planning, etc).

**Comment K.6.(i):** The heading of Table F-13 should be titled “Summary of Reclamation Specifications” rather than “Summary of Land Discharge Specifications”.

**Response:** The table heading has been modified as requested.

**Comment K.6.(j):** Section IV.G.4, Water Reclamation Requirements and Provisions includes a finding that water reclamation requirements in Attachment G are consistent with the requirements of the Recycled Water Policy and the Landscape General Permit. The Discharger asserts that at least two aspects of the Proposed Permit directly conflict with the Recycled Water Policy.

- (a) The Proposed Permit applies key provisions of the Recycled Water Policy and Landscape General Permit to all uses, including agricultural use. This was never the intention of either document, nor the corresponding stakeholder process. It would be inappropriate to apply these requirements to agricultural recycled water uses.
- (b) Provision C.5.h.iii.e in Attachment G would require special studies where “... unique, site-specific conditions exist, such as where recycled water is proposed to be used for irrigation over high transmissivity soils and/or over a shallow (5

feet or less) high quality groundwater aquifer ...” This requirement has been inappropriately applied to the agricultural irrigation, and as modified this provision would not substantially broaden and fundamentally change a key provision of the Recycled Water Policy by the simple insertion of “and/or” in place of “and”. The Discharger is concerned about the potentially precedent-setting impacts that this language change may have on future recycled water permits, particularly for agricultural reuse, that have not been fully promulgated through the appropriate administrative and public review process.

**Response:** The Regional Water Board disagrees that it is inappropriate to apply key provisions of the State’s Recycled Water Policy and the Landscape Irrigation Permit to agricultural recycled water use. Regional Water Board staff discussed with State Water Board staff the issue of applying requirements in the Landscape Irrigation Permit to agricultural recycled water uses. State Water Board staff confirmed that there is no regulation or policy limiting a Regional Water Board from applying the requirements to agricultural recycled water uses. The expectation is that agricultural users are already familiar with proper management of salt and nutrients and additional guidance was needed for urban users. Because many of these provisions were included in the Landscape General Permit in order to ensure the protection of surface and ground water quality, it makes sense to incorporate provisions that protect water quality, such as requiring an Operation and Maintenance Plan and an Irrigation Management Plan, no matter what the use of the recycled water. It is imperative that the Regional Water Board set requirements that protect surface and groundwater for all recycled water uses and that we ensure sustainable practices for water use.

Additionally, some permit conditions for recycled water use are included in order to minimize incidental runoff. The Regional Water Board recently adopted an amendment to the Water Quality Control Plan for the North Coast Region. The amendment allowed for previously prohibited discharges of incidental runoff to occur as long as such releases were minimized through the use of site best management practices.

Provision C.5.h.iii.e in Attachment G has been changed to make the language of the Proposed Permit consistent with the Recycled Water Policy. Specifically, the words “and/or” have been replaced by the word “and”.

**Comment K.6.(k):** The Discharger identified a conflict between Fact Sheet section VI.E, Reclamation Monitoring Requirements and Table E-7 of the Monitoring and Reporting Program (Attachment E of Proposed Permit). Table E-7 identifies monthly monitoring of flow rate to authorized reclamation sites, while the Fact Sheet identifies daily flow monitoring. The Discharger makes the assertion that the flow rate to authorized reclamation sites should be on a monthly, rather than daily, basis.

**Response:** Table E-7 correctly identifies monthly monitoring of flow rate to authorized reclamation sites. Section VI.E of the Fact Sheet has been corrected to reflect the monthly flow monitoring requirement.

**Comment K.6.(I):** The Discharger requests clarification regarding receiving water studies in Fact Sheet section VI.F.1, Receiving Water Monitoring Requirements. The Discharger also expressed its appreciation and support for the option to modify the receiving water monitoring location, if necessary.

**Response:** Fact Sheet section VI.F.1 of the Proposed Permit has been modified to include the Discharger's suggested changes.

**Comment K.7:** In general, the Discharger is extremely disappointed by the additional obstacles to water recycling that this Proposed Permit imposes, particularly through the Water Reclamation Requirements and Provisions contained in section C in Attachment G.

Of great concern to the Discharger is the fact that in spite of having completed an extensive and expensive CEQA and public participation process for its recycled water system, the Proposed Permit approves none of the recycled water irrigation areas covered in that process. This is also despite the fact that the project is the Discharger's solution to comply with the seasonal discharge prohibition imposed by the Regional Water Board, and that the Regional Water Board staff expressed unquestionably strong support for the project during the public comment period.

Many of the Attachment G, section C provisions, including the additional approval, public input and special study requirements, go well beyond what has been required of other water recyclers with lower levels of treatment, and well beyond what the Discharger could have reasonably expected. These provisions are also contrary to the Recycled Water Policy and the numerous statutes encouraging the use of recycled water.

If modifications are not made to the recycled water requirements, the Discharger is concerned that it cannot reasonably be expected to meet the CDO time schedule for compliance with the seasonal discharge prohibition.

**Response:** It is not the Regional Water Board's intent to create obstacles to water recycling. The expanded requirements are intended to protect water quality and will also assure the public that water quality and public health will be protected.

The Recycled Water Policy and the Landscape General Permit support the need for requiring additional technical information to demonstrate that reclamation will result in minimal degradation to surface water or groundwater. The expanded requirements and provisions in Attachment G, including requirements for technical information, public noticing, and monitoring and oversight of reclamation areas are based on the Recycled Water Policy and the Landscape General Permit. These

provisions and requirements are not intended to be a disincentive to the voluntary use of recycled water. Requirements for hydraulic and nutrient agronomic rate determinations and oversight of reclamation uses has become a well-established standard, particularly in agricultural areas of the State. Although the preparation of an irrigation plan for each application site does require some initial effort, this approach allows for the Discharger to avoid significant expenditures associated with groundwater monitoring, site-specific antidegradation analyses and the preparation of a detailed groundwater basin salt and nutrient management plan.

The requirement for submittal of a report of waste discharge has been changed to a technical report submittal. In addition, the public comment period for the technical report has been increased from 21 days to 30 days to maintain consistency with the Landscape Irrigation General Permit.

Regional Water Board staff anticipates that once the Discharger works through the process with its first recycled water use site, it will be able to easily replicate the process with following sites. Most important will be to provide sufficient information prior to the start of reclamation to demonstrate that each recycled water use site is using hydraulic and agronomic rates, that sufficient best management practices will be employed, and that monitoring and inspections will be conducted to demonstrate that incidental runoff is minimized and water quality is protected.

Water Reclamation Provision C.5 in Attachment G and Attachment G-1 have been modified to acknowledge the proposed recycled water use sites that were addressed in the City's 2005 FEIR and to provide conditional approval of the sites, pending submittal and approval of the technical report identified in the same Provision. In addition, the Provision has been modified to include language that states that the Regional Water Board will limit public comment on the information provided in the technical report to comments on the proposed management practices and hydraulic and nutrient agronomic rates proposed by the Discharger that are related to protection of surface water and groundwater quality and beneficial uses thereof. It is not the intent of the Regional Water Board to revisit issues that have already been addressed in the certified FEIR.

**Comment K.7.(b):** The Discharger is concerned that the Proposed Permit requires that all runoff incidents, including incidental runoff, be summarized in quarterly recycled water monitoring reports, even though Attachment G, Finding A.7 recognizes that minor runoff violations are unavoidable and present a low risk to water quality. The Discharger expresses the concern that this is an impractical and impossible standard to meet and unnecessary given the Regional Water Board's own finding that minor runoff violations are unavoidable and present a low risk. The Discharger requests that runoff event reporting in the Proposed Permit be consistent with the Spill Reporting requirements in the Landscape General Permit.

**Response:** The Discharger must report all runoff incidents, including incidental runoff incidents that the Discharger is aware of. Regional Water Board staff do not

see this as an impractical and impossible standard. Reporting of runoff incidents, including incidental runoff, provides a means to evaluate the effectiveness of best management practices. The Regional Water Board does not expect that the Discharger would be able to report runoff incidents that it is not aware of. Water Reclamation Requirement B.8 in Attachment G has been modified to add clarifying language as follows: “The Discharger shall require each recycled water user to report all violations of recycled water regulations identified in this Order, including runoff incidents. All reported violations of recycled water regulations shall be reported included in the Discharger’s quarterly recycled water monitoring report, including incidental runoff events that the Discharger is aware of.”

The Spill Reporting requirements in the Landscape General Permit are much less stringent than what the North Coast Region feels are necessary to protect water quality and assure the public that recycled water is being properly used. The Landscape General Permit requires reporting of spills of 1,000 gallons or more. Spills of lesser volumes, however, can easily reach surface waters during the seasonal discharge prohibition period or at unauthorized discharge points, and may result in exposure of the public to recycled water in violation of Title 22 recycled water regulations.

**Comment K.7.(d):** The Discharger is concerned that Water Reclamation Requirement B.9.b in Attachment G would make the Discharger responsible for all fertilizer application where it provides recycled water and believes that this is an inappropriate expansion of the requirements in the Landscape General Permit, which has been improperly extended to agricultural users and was never intended in the Recycled Water Policy. This requirement, as well as all other requirements in the Proposed Permit that mandate direct nutrient management, runs counter to State and Regional Water Board policies encouraging recycled water use, and is unnecessary. In addition to the low nutrient levels in the City’s recycled water, vineyard managers already have every incentive to minimize fertilizer use because excess application is harmful to grape production and quality. Any requirements related to nutritive loading should be strictly informative, where the City provides data to recycled water users on the nutrient loading from recycled water. The Discharger agrees with the way that the nutrient issue is addressed in Water Reclamation Provision C.5.h.iii.d in Attachment G, which specifies compliance by monitoring and communicating with recycled water users.

**Response:** As a master reclamation permit holder and distributor of recycled water, the Discharger is responsible for its recycled water users. Water Code 15323.1 requires permittees to establish and enforces rules or regulations for reclaimed water users and to conduct periodic inspections of facilities of the reclaimed water users to ensure compliance with the requirements of the permit. The language in Water Reclamation Requirement B.9.b in Attachment G comes directly from the Landscape Irrigation General Permit (Specification B.5). Water Reclamation Provision C.5.h.iii.f (formerly C.5.h.iii.d) provides more specifics on how the Discharger can achieve compliance with Requirement B.9.b. In order to determine proper agronomic rates

for recycled water, other sources of nutrients (fertilizers, biosolids, etc) need to be considered. This approach is entirely consistent with the recycled water policy and is integral for sustainable land and water use practices.

No changes were made to the Proposed Permit in response to this comment.

**Comment K.7.(e):** Water Reclamation Requirement B.11.a in Attachment G requires a 100-foot setback of new recycling sites from surface waters, however, there is no rationale or justification for this restriction. This requirement would eliminate recycled water irrigation on wide swaths of golf course and agricultural lands, and would require that alternative irrigation supply be installed in those areas. We strongly believe that other provisions in Attachment G requiring properly designed and managed irrigation systems already provide more than adequate protection from impacts on surface water. In the case of agricultural irrigation, drip irrigation would present only a minimal risk of runoff from normal irrigation. The detailed measures necessary to protect surface water are very site-specific, and the Proposed Permit should not prejudge what setbacks are necessary at all sites. Thus, this provision should be eliminated.

**Response:** Water Reclamation Requirement B.11.a in Attachment G has been modified to require a demonstration that additional best management practices will be implemented to prevent or minimize the potential for runoff discharging to surface water where it is infeasible to implement a 100-foot setback.

**Comment K.7.(f):** Water Reclamation Provision C.5 in Attachment G requires a full ROWD for all recycled water locations, a further 21-day (minimum) public comment period on all material in the ROWD, as well as Regional Water Board approval. The Discharger is concerned that it would be required to attempt to resolve all comments, regardless of merit or substance, and that, depending on the level of public comment, approval of each ROWD would likely require a hearing before the full Regional Water Board at a public meeting. The Discharger has several significant objections to this provision.

- (a) The elements of this Provision are not consistent with the Recycled Water Policy.
- (b) The lengthy list of details and the potential requirement for further open-ended studies where “unique, site-specific conditions” exist is an improper broadening of the language in the Landscape General Permit and it is being inappropriately applied to agricultural irrigation. The Discharger believes that requirements for nutrient management would be a significant disincentive to agricultural recycled water use.
- (c) The Discharger’s proposed reclamation system was addressed in the City’s 2005 EIR that went through a significant public review process, during which Regional Water Board staff expressed unambiguous support for the City’s plan to construct this recycled water system.
- (d) Provision C.5.h would allow an Operations and Management Plan to apply to multiple sites. While this may be feasible for the City’s turf irrigation sites, it is unlikely that the City could consolidate this approval process for vineyards,

requiring the City to run through the submittal process in Attachment G, not once, but several times.

**Response:** As stated in the response to Comment K.7, above, the Proposed Permit has been modified to require submittal of a technical report, rather than a ROWD, to include technical information needed to demonstrate that recycled water will be applied to recycled water use sites in a manner that is protective of groundwater and surface water quality.

Most of the details required in Water Reclamation Provision C.5 in Attachment G come from the Landscape Irrigation General Permit. The Landscape Irrigation General Permit includes a 30-day public comment period thus the Proposed Permit has been modified to increase the public comment period from 21 days to 30 days.

The Regional Water Board believes that it is important for the public to have the opportunity to review the proposed management practices and hydraulic and nutrient agronomic rates proposed by the Discharger. Although the City's 2005 environmental impact report for its wastewater treatment upgrade project underwent public review and comment, many of the important site-specific details for how recycled water will be applied and what measures will be taken to protect from potential discharges were not set out in that document. Water Reclamation Provision C.5 in Attachment G has been modified to include language explaining that the Regional Water Board will limit public comment on the information provided in the technical report to issues that are directly related to water quality protection. If significant public comments are received that provide substantial evidence showing potential water quality impacts, Regional Water Board staff would work with the Discharger and the commenter to attempt to resolve the issues and would bring the matter to the Regional Water Board as a last resort. The Regional Water Board is committed to supporting the use of recycled water by authorizing all reasonable recycled water uses that comply with all of the water reclamation regulations in Title 22, California Water Code, and the Recycled Water Policy. Information required by Water Reclamation Provision C.5 in Attachment G is needed to demonstrate water quality protection.

**Comment K.7.(h):** The description of the Operations Plan in Water Reclamation Provision C.5.h.i in Attachment G should be deleted because it lacks specifics and does not add any information to the Operations and Management Plan that is not covered elsewhere in the Proposed Permit.

**Response:** The language in Water Reclamation Provision C.5.h.i comes directly from the Landscape Irrigation General Permit (Provision C.5.a) and therefore is retained for consistency with that permit.

No changes were made to the Proposed Permit in response to this comment.

**Comment: K.7.(i):** Water Reclamation Provision C.5.h.iii.e in Attachment G would require special studies where " ... unique, site-specific conditions exist, such as where

recycled water is proposed to be used for irrigation over high transmissivity soils *and/or* (emphasis added) over a shallow (5 feet or less) high quality groundwater aquifer ...” This rewrites and fundamentally changes a key provision of the Recycled Water Policy by the insertion of “and/or” condition. The Recycled water Policy and Landscape General Permit were products of an extensive stakeholder process, and this modification, which has no justification, is inappropriate. Based on the comments and findings in the Proposed Permit regarding the lack of reasonable potential to cause or contribute to exceedances of applicable water quality for nitrate in the receiving water, this paragraph should be eliminated. Alternatively, this provision should be revised to only require special studies when recycled water is proposed to be used for irrigation over high transmissivity soils and over a shallow (5 feet or less) high quality groundwater aquifer and to apply only to landscape irrigation, consistent with the Recycled Water Policy and Landscape General Permit.

**Response:** Water Reclamation Provision C.5.h.iii.e in Attachment G has been modified to replace the words “and/or” with the word “and” to maintain consistency with the Landscape General Permit. See also response to comments K.6.(j).

**Comment K8:** The Discharger appreciates the Regional Water Board’s extension of the time schedule in the CDO for compliance with the seasonal discharge prohibition. However, if the reclamation provisions related to the additional approval, public input and special study requirements are not modified as requested, the Discharger cannot reasonably be expected to meet the CDO time schedule for compliance with the seasonal discharge prohibition, particularly the deadlines for tasks D, E, and G. The Discharger anticipates needing to use the CDO language in Requirement 3 that allows the Discharger to request additional time extensions for completion of the reclamation project and final compliance with the seasonal discharge prohibition.

**Response:** The Discharger is encouraged to do its best to meet the requirements and compliance schedule in the CDO. Requirement 3 of the CDO is available if the Discharger does its part to complete its reclamation project and finds that it is unable to meet the compliance schedule.

### **City of Santa Rosa**

*The City of Santa Rosa submitted a comment letter dated April 22, 2010 with the following comments:*

**Comment 1:** The City of Santa Rosa asserts that water quality objectives in the Basin Plan for specific conductance and total dissolved solids do not apply to Basalt Pond and requests that Receiving Water Limitations V.A.3 and V.A.4 be deleted from the Proposed Permit.

**Response:** See response to Comment E, as well as Comments A, B, C and K.3 under the City of Healdsburg heading.

**Comment 2:** The City of Santa Rosa asserts that the Regional Water Board should not be trying to achieve consistency in the Proposed Permit with the Statewide General Permit for Landscape Irrigation based on the argument that the Statewide permit is more restrictive because it was developed to protect beneficial uses without advance knowledge of site-specific conditions of recycled water projects.

**Response:** Regional Water Board staff contend that site-specific conditions are not known for recycled water projects that have been proposed by the Discharger. Although potential sites have been identified in the Discharger's certified final EIR, the analysis in the FEIR does not include details related to demonstrating the appropriate agronomic rate and BMPs that will be implemented for water quality protection. The requirement in the Proposed Permit for the Discharger to submit an Operations and Maintenance and Irrigation Management Plan for Regional Water Board Executive Officer approval and public review is necessary to make this demonstration.

**Comment 3:** The City of Santa Rosa is concerned that the Proposed Permit requires that all runoff incidents, including incidental runoff, be summarized in quarterly recycled water monitoring reports because this is an impractical and impossible standard to meet and unnecessary. The City requests that runoff event reporting in the Proposed Permit be consistent with spill reporting requirements in section 13529.2 of the Water Code, which requires reporting of discharge events exceeding 50,000 gallons.

**Response:** See response to Comment K.7.(b) under the City of Healdsburg heading.

**Comment 4:** The City of Santa Rosa is concerned about the requirement for a 100-foot setback of new recycling sites from surface waters and suggests that the Proposed Permit require design of appropriate facilities to protect surface water, but should not presume to know the appropriate set-back distance.

**Response:** See response to Comment K.7.(e) under the City of Healdsburg heading.

**Comment 5:** The City of Santa Rosa requests that Water Reclamation Requirement B.24 in Attachment G be modified to acknowledge the Department of Public Health's authority under section 60310(g) of Title 22 to approve alternate signage.

**Response:** The statement "CDPH may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to the Department that the alternative approach will assure an equivalent degree of public notification." from section 60310(g) of Title 22 as been added to the end of Water Reclamation Requirement B.24 in Attachment G of the Proposed Permit.

**Comment 6:** The City of Santa Rosa requests that Water Reclamation Provision C.2 in Attachment G be modified to be consistent with Title 22 requirements regarding submittal and approval of engineering reports.

**Response:** See response to Comments H and K.6(e), K.7.(a), K.7.(c), and K.7.(g) under the City of Healdsburg heading.

**Comment 7:** The City of Santa Rosa points out that Title 22 Section 60314.a requires cross-connection testing only at dual plumbed use sites and requests that Water Reclamation Provision C.3 in Attachment G be modified so that it is consistent with Title 22.

**Response:** Water Reclamation Provision C.3 in Attachment G has been modified as requested. The last sentence has been modified to read: "Where dual-plumbed systems are utilized, the Discharger shall, upon prior notification to the user, conduct regular inspections to assure cross-connections are not made with potable water systems and CDPH approved backflow prevention devices are installed and operable."

**Comment 8:** The City of Santa Rosa is concerned about requirements in Water Reclamation Provision C.5 in Attachment G that require submittal of additional irrigation site-specific ROWDs stating that this requirement is unnecessary, burdensome and inconsistent with the intent of master reclamation permits. The City is also concerned about the requirement for subjecting additional information submitted regarding each recycled water use site to a public comment period stating that the Regional Water Board staff does not need public input to determine compliance of the proposed irrigation with Title 22.

**Response:** See response to Comment K.7 and K.7.(f) under the City of Healdsburg heading.

*The City of Santa Rosa is concerned that the requirements in Water Reclamation Provision C.5.h substantially exceed the requirements of Section 7 of the Recycled Water Policy with no justification provided for the additional requirements. The City identified its specific concerns in Comments 9 through 11 which follow:*

**Comment 9:** Water Reclamation Provision C.5.h.i in Attachment G specifies that BMPs employed to maintain compliance at recycled water use areas include "emergency backup systems". The City of Santa Rosa points out that the Proposed Permit does not define nor justify this requirement, nor is this a requirement of the Recycled Water Policy or Landscape General Permit and suggests that the requirement for emergency back-up systems should be removed from the Proposed Permit.

**Response:** The language in Water Reclamation Provision C.5.h.i in Attachment G comes directly from Provision C.5 of the Landscape General Permit. An operation and maintenance plan for a wastewater facility is a common tool to ensure the proper operation and maintenance of wastewater treatment infrastructure and appurtenances. Emergency back-up systems are common in all modern wastewater treatment facilities through the incorporation of standby unit processes and/or emergency storage.

No changes were made to the Proposed Permit in response to this comment.

**Comment 10:** The City of Santa Rosa supports the proposed requirement in Water Reclamation Provision C.5.h.iii.d (now C.5.h.iii.e) in Attachment G that the Discharger inform recycled water users of the nutrient content of its recycled water and provide information on how landscape and agricultural managers calculate agronomic nutrient demand, but is concerned that the Proposed Permit may require the Discharger to control nutrient application stating that such a requirement inappropriately requires the recycled water purveyor to intrude into land management decisions where it has no such authority. The City requests that the first sentence of Water Reclamation Provision C.5.iii.d (now C.5.h.iii.e) be deleted.

**Response:** See response to Comment K.7.d under the City of Healdsburg heading.

**Comment 11:** The City requests that Water Reclamation Provision C.5.h.iii.e (now C.5.iii.f) in Attachment G be modified to change the words “and/or” to the word “and” to be consistent with paragraph 7.b.1 of the Recycled Water Policy.

**Response:** See response to Comment K.6.(j) (third paragraph) under the City of Healdsburg heading.

### **California WaterReuse**

*California WaterReuse submitted a comment letter dated April 22, 2010 which is focused on recycled water language in the Healdsburg Proposed Permit. California WaterReuse’s comments with regard to recycled water language are identical to Comments 2 through 11 raised in the City of Santa Rosa’s letter, thus responses to Comments 2 through 11 under the City of Santa Rosa heading also respond to California WaterReuse’s comments.*

### **Clean Water Coalition of Northern Sonoma County**

*The Clean Water Coalition of Northern Sonoma County (CWC) submitted a comment letter dated April 23, 2010 which is focused on water reclamation and groundwater protection. CWC describes itself as an organization comprised of local property owner groups and concerned individuals within the agricultural valleys in Northern Sonoma County. CWC represents citizens who live in the Alexander Valley, Dry Creek watershed or Middle Reach of the Russian River, and who depend on high-quality groundwater supplies for drinking, domestic uses, agriculture and wineries. Following is a summary of CWC’s comments and Regional Water Board staff responses to those comments.*

**Comment 1:** CWC identifies the fact that they co-commissioned<sup>2</sup> four studies of the geology, hydrology, water balances, and potential for groundwater contamination from reclamation projects in the alluvial valleys that CWC represents and that these studies concluded that the potential for contaminants concentrating in the soil and percolating to high quality groundwater aquifers is high. CWC states that it has found CEQA documents on such reclamation projects to be deficient in identifying and mitigating such negative effects; that CWC's comments focus on this potential for groundwater contamination; and their belief that protection from such contamination is critical because this large, high quality groundwater aquifer is a source of municipal, domestic, agricultural, and industrial water supply.

**Response:** As stated in section II.E of the Proposed Permit, the Regional Water Board is required to consider the final certified CEQA document(s) and reach its own conclusions on whether and how to approve a permit for the Discharger's reclamation plan and has the responsibility for mitigating or avoiding direct or indirect environmental effects of those parts of the reclamation plan that are within its jurisdiction to approve. The Proposed Permit incorporates as permit requirements mitigation measures that the Discharger identified in its FEIR (see section III.B of the Fact Sheet to the Proposed Permit) and includes a requirement for submittal of a technical report (Attachment G, Water Reclamation Provision C.5) with technical information that is needed to demonstrate that the Discharger has clearly identified hydraulic and nutrient agronomic rates, BMPs, user agreements, and inspection schedules to ensure that reclamation occurs in a manner that is protective of water quality.

No changes were made to the Proposed Permit in response to this comment.

**Comment 2:** CWC states its strong support of the Water Reclamation Requirements and Provisions contained in Attachment G of the Proposed Permit, including the requirement for submission and approval of a Report of Waste Discharge (ROWD) to be subjected to a public comment period prior to approval of any specific reclamation project. CWC requests that these reclamation requirements and provisions be retained and strengthened in the final Order.

**Response:** The Regional Water Board appreciates CWC's support of the water reclamation requirements and provisions. Water reclamation requirements have been retained in the Proposed Permit with some modifications as discussed in response to other comments in this Response to Comments document.

See in Particular Response to City of Healdsburg comment K.7.(b). No changes were made to the Proposed Permit in response to this comment.

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<sup>2</sup> Other organizations that co-commissioned the studies are Soda Rock Neighborhood Association, Russian Riverkeeper, Dry Creek Valley Association, and Westside Association to Save Agriculture

**Comment 3:** CWC requests that language in all sections of the Proposed Permit referring to CEQA documents and Attachment G make it clear and unambiguous that all reclamation projects, regardless of the status of current CEQA documents, must meet all of the requirements in Attachment G in order to be approved. CWC is concerned that some language in the Proposed Permit infers that reclamation projects with certified CEQA documents may already be approved and not subject to the Attachment G ROWD, public notice and approval requirements. CWC refers to language on pages 8, 9, F-15 to F-19, G-7 and G8 of the Proposed Permit as contributing to the ambiguity. CWC suggests that the Proposed Permit would provide clarity that all projects are subject to the Attachment G provisions, by placing the final sentence in Fact Sheet section III.B into a separate paragraph and modified to read, "All reclamation activities, irregardless of the status of current CEQA documents, must meet the provisions in Attachment G."

**Response:** The last sentence of section II.E of the Proposed Permit has been placed into a separate paragraph so that it is clear that all reclamation activities must comply with the requirements and provision in Attachment G, regardless of the status of current CEQA document(s). See also response to Comment K.7 (fifth paragraph) under the City of Healdsburg heading.

**Comment 4:** CWC states that the Proposed Permit must be clear and unambiguous that groundwater monitoring may be required depending upon the specific findings in the ROWD required in Attachment G. CWC requests that section VIII.B of the Monitoring and Reporting Program (Attachment E of Proposed Permit) and section VI.F.2 of the Fact Sheet say the same thing and that the Proposed Permit makes it clear that the Regional Water Board has the authority to mandate groundwater monitoring and reporting if it deems such monitoring necessary.

**Response:** The Regional Water Board has the authority to require groundwater monitoring if it is deemed necessary to investigate the quality of groundwater in relation to a discharge. Section VIII.B of the Monitoring and Reporting Program (Attachment E of Proposed Permit) has been modified to contain the same language that is in section VI.F.2 of the Fact Sheet. The sentence "Groundwater monitoring may be established in the future if necessary to assess impacts of effluent disposal to the reclamation system." has been added to section VIII.B of the Monitoring and Reporting Program.

**Comment 5:** CWC requests that requirements for specific studies and groundwater monitoring for a project having unique site-specific conditions should be strengthened to ensure groundwater protection in areas such as the Russian River Middle Reaches' alluvial aquifers. CWC requests that the last sentence in Attachment G, Water Reclamation Provision C.5.h.iii.e be modified to read: "The special study ~~may include groundwater monitoring,~~ must include development of a detailed water balance and/or salt and nutrient management plan and groundwater monitoring." CWC also notes that it would be of value to state in the Proposed permit that reclamation on the Syar property would meet the definition of having unique, site-specific conditions.

**Response:** As identified in response to Comment K.7.(i) under the City of Healdsburg heading, Water Reclamation Provision C.5.h.iii.e was modified to replace the words “and/or” with the word “and” to maintain consistency with the Recycled Water Policy. Other provisions in Attachment G give the Regional Water Board the ability to obtain additional information or request studies. Water Reclamation Provision C.5.h.iii.(a) in Attachment G, which comes from the Landscape Irrigation Permit clearly requires an agronomic rate analysis and section C.5.h.iii.(h) in Attachment G allows the Regional Water Board to require additional information if needed to ensure that water quality is protected. Three other sections of the Proposed Permit, including Effluent Limitation IV.C.2.b. and Attachment G, Water Reclamation Requirements B.11.f and Water Reclamation Provision C.5.h have been modified to emphasize the fact that the Proposed Permit requires reclamation to occur at rates that do not exceed the hydraulic and nutrient requirements of the crop or vegetation being irrigated.

The Regional Water Board will not, at this time, make the determination that reclamation on the Syar property would meet the definition of having unique, site-specific conditions. If Healdsburg brings to the Regional Water Board a technical report, as required under section in Attachment G, in order to allow use of reclaimed water at the Syar property, a determination would be made at that time whether a site has unique, site-specific conditions.

### **Russian Riverkeeper**

*The Russian Riverkeeper submitted a comment letter dated April 21, 2010. Russian Riverkeeper describes itself as an organization having 1450 members in support of the mission to work with the community to advocate, educate and uphold environmental laws to ensure the protection and restoration of the Russian River. Following is a summary of Russian Riverkeeper’s comments and Regional Water Board staff responses to those comments.*

**Comment 1:** Russian Riverkeeper states strong support of most of the Proposed Permit terms.

**Response:** The Regional Water Board appreciates Russian Riverkeeper’s support of the Proposed Permit terms. No changes were made to the Proposed Permit in response to this comment.

**Comment 2:** Russian Riverkeeper requests that the Proposed Permit clarify that all reclamation projects must comply with conditions in Attachment G. The commenter identifies language on pages 19 (footnote 8), F-15 to F-19, and G-7 to G-8 (paragraph 5).

**Response:** See response to Comment 3 under the Clean Water Coalition heading.

**Comment 3:** Russian Riverkeeper states that Attachment E, section VII-B must acknowledge that Attachment G could require groundwater monitoring and suggests

adding the phrase “ ... unless required under Attachment G.” to the end of the sentence in this section.

**Response:** Staff believes that Russian Riverkeeper is referring to section VII.B of Attachment E. See Response to Comment 4 under the Clean Water Coalition heading.

**Comment 4:** Russian Riverkeeper requests clarification regarding how Water Reclamation Requirement B.13 in Attachment G, the prohibition against direct or windblown spray or mist from entering places where the public could be exposed, will be met by irrigators. Russian Riverkeeper is particularly concerned about how this prohibition will be met on urban reclamation parcels, such as the golf course, where current irrigation practices with potable water cause overspray to reach public sidewalks and roadways and even result in runoff to storm drains.

**Response:** The Discharger will need to work with the golf course to implement practices that will prevent overspray and protect the public from exposure to recycled water. This may include changes in irrigation management practices (e.g., time of day, irrigation rate, no irrigation during windy conditions, etc) and/or physical changes to the irrigation equipment and layout (e.g., move irrigation lines far enough away from areas of potential public contact, modify type of sprinkler nozzles, etc.) as necessary to comply with Water Reclamation Requirement B.13 in Attachment G.

No changes were made to the Proposed Permit in response to this comment.

**Comment 5:** Russian Riverkeeper states that the conditions and requirements in Attachment G are critical to implementing the State Recycled Water Policy and protecting groundwater and that Russian Riverkeeper participated in the development of the Recycled Water Policy to ensure protection of existing water quality so that the goal of extending our total water supply in the State is realized. The requirements in the Recycled Water Policy for site-specific studies were driven by the need to ensure we first do no harm when increasing our state’s use of recycled water.

**Response:** Attachment G requirements implement many of the requirements in the Recycled Water Policy and are intended to protect surface water and groundwater. The Operations and Management Plan, which includes an Irrigation Management Plan, must provide a sufficient level of detail to demonstrate protection of surface and groundwater quality, otherwise additional site-specific studies may be required by the Regional Water Board.

No changes were made to the Proposed Permit in response to this comment.

**Comment 6:** Russian Riverkeeper states that conditions identified in the Recycled Water Policy as requiring site-specific studies are present in recycled water use areas proposed under this permit. Russian Riverkeeper identifies the alluvial soils in the Middle Reach of the Russian River, recent studies in the Napa Valley, and groundwater

data that show elevated concentrations of total dissolved solids and nitrates in the area proposed for agricultural recycled water use.

**Response:** See response to Comment 5 under the Clean Water Coalition heading.

**Comment 7:** Russian Riverkeeper strongly supports requirements for public review on individual reclaimed water projects and engineering reports.

**Response:** Comment noted. No changes were made to the Proposed Permit in response to this comment.

### **Westside Association to Save Agriculture**

*The Westside Association to Save Agriculture (WASA) submitted a comment letter dated April 23, 2010. WASA describes itself as a community organization formed to promote stewardship of the land and to protect both agricultural use and natural resources of the Middle Reach of the Russian River. Following is a summary of WASA's comments and Regional Water Board staff responses to those comments.*

**Comment 1:** WASA requests that permit language be clear that Attachment G provisions apply to all reuse projects, regardless of the status of a re-use project's environmental documentation.

**Response:** See response to Comment 3 under the Clean Water Coalition heading.

**Comment 2:** WASA requests removal or clarification of "confusing and circular references" for the Syar agricultural reuse project. WASA is concerned that current environmental documents have virtually no analysis and relatively few mitigations to protect surface water or prevent groundwater contamination.

**Response:** The Proposed Permit contains language that clearly requires the Discharger to submit a technical report with additional information that is needed to demonstrate that water quality will be protected before the Discharger can begin using/allowing the use of reclaimed water at any specific site, including the Syar agricultural reuse project. For reclamation uses, the Discharger must include agronomic rate calculations and BMPs that will be implemented.

**Comment 3:** WASA recommends that, at a minimum, the required 100-foot buffer between wastewater application and surface water also apply to the terrace pits, assuming that the appropriate studies have been completed that demonstrate that there will be no impacts to groundwater and surface water by an ag-reuse project.

**Response:** The Proposed Permit requires the 100-foot setback from all surface waters, including the terrace permits. As noted above in the response to Comment K.7.e under the City of Healdsburg heading, Water Reclamation Requirement B.11.a in Attachment

G has been modified to allow for the possibility of less than a 100-foot setback under some circumstances.

**Comment 4:** WASA expresses the concern that a recycled water spill or over-irrigation would irreparably impact the drinking water aquifer and recommends that the Operation and Management and Irrigation Management Plans be based on accurate and site-specific agronomic studies, with adequate requirements for Discharger monitoring and non-compliance fines.

**Response:** Protection of groundwater and surface water quality is the goal of the requirements and provisions in the Operation and Management and Irrigation Management Plans, which require the submittal of a site-specific plan that addresses agronomic rates and BMPs to protect groundwater and surface water. Typically, groundwater monitoring is required for land disposal of treated wastewater and/or where evidence exists that recycled water application is threatening to impact or is impacting groundwater or surface water. The Regional Water Board does not expect this to be the case due to the high level of treatment of Healdsburg's recycled water and the requirement for the Discharger to submit a plan for the agronomic application of recycled water.

**Comment 5:** WASA recommends more protective requirements for domestic wells, including groundwater monitoring.

**Response:** The Proposed Permit contains regulatory requirements from Title 22, the Water Code, the Recycled Water Policy, and the Landscape Irrigation General Permit, including required setbacks between recycled water application areas and domestic wells. As identified in the response to Comment 4 under the Clean Water Coalition heading, groundwater monitoring may be required if it is deemed necessary to investigate the quality of groundwater in relation to a discharge.

### **Russian River Watershed Protection Committee**

*Brenda Adelman, on behalf of the Russian River Watershed Protection Committee (RRWPC), submitted an email with comments on April 23, 2010. Following is a summary of RRWPC's comments and Regional Water Board staff responses to these comments.*

**Comment 1:** RRWPC expresses support of the Water Reclamation Requirements and Provisions in Attachment G of the Proposed Permit.

**Response:** Comment noted. No changes were made to the Proposed Permit in response to this comment.

**Comment 2:** RRWPC states that Water Reclamation Requirement B.7 in Attachment G (requiring the Discharger to notify recycled water users if recycled water that does not meet the recycled water requirements of the permit is released into the reclamation

system) should include a statement that identifies the need for cessation of irrigation until notification indicates that recycled water quality meets permit requirements.

**Response:** Water Reclamation Requirement B.6 in Attachment G requires the Discharger to discontinue the delivery of recycled water during any period in which there is reason to believe that the requirements for recycled water use are not being met.

No changes were made to the Proposed Permit in response to this comment.

**Comment 3:** RRWPC requests definition of what constitutes an appropriate setback to street gutters and storm drain inlets (Water Reclamation Requirement B.11.b in Attachment G) and believes that prohibitions against irrigation of median strips or narrow vegetative strips between sidewalk and street with recycled water have been set in a municipal storm water permit.

**Response:** It is difficult to establish a single set-back to street gutters and storm drain inlets that is appropriate in all circumstances. Each potential recycled water use site must be evaluated on a case-by-case basis. For example, a set-back may not be necessary if the recycled water use area is graded away from the gutter or if the Discharger implements alternate means to capture urban irrigation runoff, such as the inclusion of gate valves and pumping of collected recycled water in the storm drain piping to prevent irrigation runoff that enters the storm drain system from reaching surface waters. In other cases, such as sloped areas adjacent to the gutter where there are no measures to capture recycled water that enters the storm drain, recycled water use may not be appropriate. The Discharger's Operations and Maintenance/Irrigation Management Plan must demonstrate that appropriate setbacks and BMPs will be implemented to minimize the potential for runoff.

In addition, the municipal storm water permit for the City of Santa Rosa, County of Sonoma and Sonoma County Water Agency, as well as the revised Basin Plan Storm Water Action Plan adopted by the Regional Water Board in July 2009 both require municipal storm water permittees to develop a non-storm water management plan for approval by the Regional Water Board Executive Officer. This plan must include specific best management practices (BMP) to be implemented, public education and outreach, inspections, and monitoring to ensure that non-storm water is not discharged to storm drain systems. No specific prohibition against irrigation of median or sidewalk strips have been established, although this prohibitory practice has been suggested as a possible BMP.

No changes were made to the Proposed Permit in response to this comment.

**Comment 4:** RRWPC suggests that Water Reclamation Provision C.3 in Attachment G be modified to designate a minimum interval between inspections to have meaning and effectiveness.

**Response:** Water Reclamation Provision C.5.g in Attachment Grequires the Discharger to submit a use site inspection schedule as part of the recycled water technical report submittal for the Discharger's recycled water use sites. The frequency of inspections may vary, typically from daily to monthly, depending on such factors as irrigation method, frequency of irrigation, time of year, proximity to surface waters, potential for human exposure, etc.

No changes were made to the Proposed Permit in response to this comment.

**Comment 5:** RRWPC is disappointed that the Proposed Permit does not attempt to deal with pesticide, herbicide, fungicide issues and suggests that language be added to the permit that prohibits irrigating within a certain time of application.

**Response:** RRWPC is raising an issue that is not pertinent to the Regional Water Board's consideration of reclamation requirements and is beyond the Regional Water Board's mandate to regulate directly. The Regional Water Board recognizes that pesticides, herbicides and fungicides may be utilized in areas that apply recycled water, but these chemicals are also used in areas that are irrigated with potable water. These chemicals are subject to regulations of other local and State agencies and the Regional Water Board anticipates that users of these chemicals will use them in accordance with these regulations.