

Mount Shasta Bioregional Ecology Center

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June 6, 2007

Bryan Smith and James Pedri
Central Valley Regional Water Quality Control Board
415 Knollcrest Suite 100
Redding, CA 96002

Re: **NPDES permit CA 0078051**
Waste Discharge Requirements for the City of Mount Shasta
Waste Water Treatment Plant and
U.S. Dept. of Agriculture
Siskiyou County

Via fax: (530) 224-4857 with attachments and e-mail to bsmith@waterboards.ca.gov

Dear Bryan Smith and James Pedri,
The Mount Shasta Bioregional Ecology Center is a non-profit organization protecting the environment of Mount Shasta and its surroundings since 1988. The Ecology Center aspires to be the voice of those who value nature, spirit, and culture and whose efforts give citizens a voice, countering the pressures applied by vested interested. The members of the Ecology Center utilize the Sacramento River and its surroundings for enjoyment, recreation, solitude, hiking, water contact sports, fishing, including those that have tourist-based recreational businesses.

Before we address the issues within the proposed permit, we'd like to comment on the public Notice on the NPDES permit. This Notice states that the NPDES permit is a *renewal* of an existing permit, although *there are significant revisions*. The Notice also fails to inform the public that the proposed permit *seeks* to increase the discharge to the Sacramento River from an existing .70 mgd to .80 mgd and that such an increase is contingent upon improvements.

Effluent discharges to the Sacramento River are based on time periods and not on actual precipitation or river flows

The Notice states that discharges to the Sacramento River are prohibited between 15 June and 14 September because of the "recreation season", however commercial rafting periods generally have *completed* their runs on the Sacramento River by mid-June

because of low flows. In addition, kayakers can use the Sacramento River at all times of the year but especially during what the permit considers the “shoulder” periods.¹ We acknowledge that the proposed NPDES permit does have more stringent provisions during these “shoulder” periods than in the wet season, but question whether this is adequate. **Thus we ask the Water Board to eliminate the “shoulder” periods and simply extend the time for prohibiting discharges to the Sacramento River from April 15 through November 15th.** In addition, the WB could require the Discharger to install an active gage at the effluent discharge point to collect actual river flow conditions since the river flow varies greatly depending on the year.

As stated previously, effluent discharges are prohibited during the drier months of June 15th through September 14th to the Sacramento River. From my experience of more than a decade of living here, the dry period extends well into October and sometimes mid-November, but the permit defines this as a “shoulder” period and thus allows discharges to the Sacramento River. However, this year is extremely dry and the Sacramento River was at low flows as early as May compared to previous years.² If this year is the beginning of a drought trend, then the dry period of minimum river flows would come sooner and will last longer than what the permit recognizes. However the proposed permit fails to make adjustments for the variable yearly precipitation patterns, including drought. The proposed permit does not adequately protect water quality and the beneficial uses of the river since it allows effluent discharges to the river that is not based on actual river flow conditions, but an arbitrary time period.

We also ask the Water Board to then explain why the dry weather months (and thus the prohibition of discharges to the Sacramento River) are limited to June 15th through Sept 15th in the NPDES permit since recreation also occurs outside of these time periods? Did previous WWTP permits prohibit discharges to the Sacramento River as early as May 1st and as late as November 1st? What is this determination of dry weather flow based on? Is it based on science and available data such as river flows, documented precipitation patterns or convenience for the Discharger?³ The permit provisions for effluent discharge to the Sacramento River should be based on actual flow data, not some *time* period that may not reflect actual flow conditions.

Effluent flow limits to the Sacramento River are not protective of water quality

The existing Waste Water Treatment Plant (WWTP) design average flow is .70 million gallons per day (mgd).⁴ The revised NPDES permit CA 0078051 *proposes to increase* the effluent discharge to the Sacramento River, described as EFF-001 in the permit, to

¹ The shoulder period is defined as *April 15th through June 14th and September 16th through November 15th*. See Fact Sheet at page F-5.

² The year has about 60% of normal precipitation.

³ The Box Canyon dam at the Sacramento River is the closest calculated river flow data source to the WWTP and is *upstream* from the WWTP. It may be possible to obtain data from the dam.

⁴ This number of .70 mgd is mentioned in various documents that are attached: the recent January 4, 2007 Water Board comments and earlier 30 September 2004 Water Board Compliance

0.80 mgd once inter-pond piping is completed.⁵ However, *this increase is not consistent with:*

- a) the required improvements to the WWTP. The revised NPDES permit has omitted the **Stage I** Improvements that include replacing the 750 feet of river outfall with 24-inch pipeline and parallel 550 feet with 18-inch pipeline. See 2003 Pace Engineering Report.⁶
- b) Water Board comments made in January 2007 that described the completion of Stage I requirements as necessary for increasing the capacity to **only** .075 mgd.⁷
- c) Water Board comments to the City of Mt. Shasta in September 2004: “It is important to implement the recommendations of your consultant Pace Engineering as soon as possible so that the plant’s rated capacity can be increased from 0.70 to 0.75 mgd”⁸
- d) the Pace Civil Inc. 2003 Report on the WWTP Stage I improvements. Table 3 outlined a two stage expansion plan to take the plant from 0.70 mgd to 0.75 (Stage one) and from 0.75 mgd to 0.90 mgd (Stage 2).⁹
- e) the economic and recreational value to those downstream users that includes contact water sports and the numerous tourist-based local and regional businesses dependent on high quality water. The NPDES permit has not provided any economic analysis that demonstrate that the benefits of the City's expansion of the Waste Treatment Plant to 0.80 mgd to accommodate additional housing outweigh other recreational and economic uses of the Sacramento River.

Please note that the *Stage I and Stage II* improvements for the WWTP are also shown in **Attachment C** of the proposed NPDES permit. The diagram in Attachment C also shows the replacing of the 750 feet of river outfall with 24-inch pipeline and the parallel 550 feet with 18-inch pipeline as a Stage I improvement.

Inspection which describes the WWTP maximum dry weather monthly average effluent flow limit of .70 mgd

⁵ See NPDES **IV**. Effluent Limitations Discharge Point EFF-001 **No. 2**. A Effluent Limits at page 11; Table 6A at page 9; and Table 6B at page 10.

⁶ See *Pace Civil Inc. 2003 Report* Table 3: the City of Mt. Shasta Wastewater Treatment Plant Capacity Evaluation. This Report outlines WWTP improvements necessary for increasing WWTP capacity to **.75 mgd** based on Stage 1 repairs and additional capacity for Stage II repairs.

⁷ See attached recent *January 4, 2007* Central Valley Water Board comments (at page 3) that describes the maximum dry weather monthly average effluent flow limit of .70 mgd and an increase to **.75mgd** based on completing Stage I repairs.

⁸ See attached *30 September 2004 WB Compliance Inspection* which describes the maximum dry weather monthly average effluent flow limit of .70 mgd and the 2003 Pace Report for increasing WWTP capacity to **.75mgd**

⁹ See attached *Pace Civil Inc. 2003 Report* Table 3 and the list of improvements in the attached Pace Civil Inc. 2003 and referenced in the *January 4, 2007* Central Valley Water Board comments referenced above.

Collection System maintenance is required but lacking in the NPDES permit

The Discharger's collection system is part of the treatment system that is subject to this Order.¹⁰ As such, pursuant to Federal Regulations 40 CFR section 122.41, the Discharger must properly operate and maintain its collection system, report any noncompliance, and mitigate any discharge from the collection system that is in violation of this Order. However, the revised NPDES permit has *not* addressed the historical I&I problems with the collection system. These historical I&I problems affect the WWTP's effectiveness during wet weather periods where the collection system is at capacity.¹¹ It is also possible that some areas of the collection system are at capacity during *dry* weather flows, such as the Alma Street manhole and its corresponding pipe.¹² In the past, "sewage overflows have resulted in a public health hazard requiring posting of contaminated areas and creating a public health nuisance and the likelihood of effluent and receiving water violations will continue and further impair water quality."¹³

Section 13301 of the California Water Code states that
When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to that system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing.

Infrastructure improvements to the WWTP *and the collection system* have also been outlined in the 2005 the Roseburg Commerce Park Infrastructure Installation Project Initial Study/Negative Declaration.¹⁴ We acknowledge that some improvements have been made to the collection system, however key bottleneck areas persists despite these improvements such as at the Ream Avenue-Old State manhole that is only 50 yards from Cold Creek to the south, a tributary of the Sacramento River. The NPDES Fact Sheet only vaguely describes upgrading the collection system "particularly the section in the

¹⁰ See **VI. Provisions C. Special Provisions 5.d Collection System**

¹¹ For example, see attached *02 January 2002 Inspection Report* and *30 September 2004 Inspection Report* of the Mt. Shasta WWTP

¹² Rod Bryan, Public Works Director expressed these concerns at the May 15, 2007 Mt Shasta Planning Commission.

¹³ See Mt. Shasta City's Cease and Desist WWTP WDR Order No. 97-092 G. Provisions No. 13

¹⁴ See attached Figure 4.11 Necessary Sewer Improvements from the Roseburg Commerce Park Infrastructure Installation Project Initial Study/Negative Declaration.

Ream Ave –Old Stage area” but the *permit provision* fails to include any upgrades and repairs of the collection system.¹⁵ Instead, the NPDES permit relies solely on completing the inter-pond piping and does *not* address replacing the river outfall nor the collection system repairs. As such, the NPDES is inadequate.

The NPDES permit should include a list of any and all improvements required in the collection system and/or issue a Cease and Desist Order per Section 13301 of the California Water Code. The City of *Mt. Shasta Sewer Flow Measurement Project* that was completed by Schlumpberger Consulting Engineers (SCE) in September 12, 2005 measured eleven (11) sites within the City's Collection System. That capacity study documented "over capacity flows" at Alma Street at Mt. Shasta Blvd.; Interceptor at the wetlands manhole outlet; and Interceptor at field north of Ream during "three storm events: at the main interceptor on December 8, 2004; at the interceptor at wetlands in field on March 27, 2005; and Alma Street during the May 8-9, 2005."¹⁶ The SCE Study "verified that surcharging of the system was taking place at these locations" and that "there are still flows over 2,000 *gallons per minute* (gpm) at the WWTP during large storm events...." This amounts to an influent flow of over 2.8 mgd to the WWTP. The Fact Sheet describes the individual components of the WWTP and their estimated capacity.¹⁷ The capacity of the WWTP at the aerated lagoons, the floatation thickening and filtration, disinfection, leachfield pumps, leachfield, and discharge to Golf Course are all significantly less than this 2.8 mgd influent flow that can occur during large storm events.

Thus, we recommend: a) the WWTP shall maintain the effluent flow limit of .70 mgd until b) *all* Stage I repairs, including replacing both outfalls to the Sacramento River, completing inter-pond piping, *and* making all necessary improvements to the *collection system* are completed and issuing a Cease and Desist Order (in order to stay within the influent constraints and limitations of the existing system) and b) reduce the effluent limitations to the Sacramento River (EFF-001) to 0.75 mgd instead of 0.80 mgd after all of these repairs are completed.

Thank you for your attention to these comments. Please notify us of any and all communications, notices, hearings, etc on this issue.

Sincerely,
Peggy Risch
Peggy Risch
Environmental Research Associate

Attachments –see page 6 of this comment letter

¹⁵ See Fact Sheet at **II. Facility Description E. Planned Changes** at page F-7

¹⁶ See attached copy of the *Mt. Shasta Sewer Flow Measurement Project*

¹⁷ See Fact Sheet at **II. Facility Description E.Planned Changes** at page F-8

- *4 January 2007* Central Valley Water Board comments on WWTP – 4 pages
- *Mt. Shasta Sewer Flow Measurement Project* Schlumpberger Consulting Engineers
September 12, 2005 – 10 pages
- *Figure 4.11 Necessary Sewer Improvements* from Initial Study/Negative Declaration
of the Roseburg Commerce Park Infrastructure Installation Project – 1 page
- *30 September 2004* WB Compliance Inspection – 1 page
- *02 January 2002* Inspection Report – 3 pages
- *Pace Civil Inc. 2003 Report Table 3* – 3 pages

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