

**TNC HOLDING COMPANY, LLC
60 DORMAN AVENUE
SAN FRANCISCO, CA 94124**

October 24, 2011

Mr. James D. Marshall
Senior Engineer
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

**TENTATIVE WASTE DISCHARGE REQUIREMENTS AND TENTATIVE TIME
SCHEDULE ORDER FOR TNC HOLDING COMPANY, LLC AND THE RALPH F. NIX
1995 REVOCABLE TRUST - STURGEON FARM SACRAMENTO COUNTY**

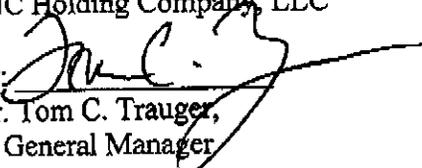
Dear Mr. Marshall:

TNC Holding Company, LLC (TNC) appreciates this opportunity to submit comments on the Tentative Waste Discharge Requirements (TWDRs) and Time Schedule Order (TSO) for TNC's sturgeon farm operation. The Central Valley Regional Water Quality Control Board (Regional Board) issued the TWDRs for public comment on September 21, 2011. The comment period extends through October 24, 2011.

The attached comment document was prepared by West Yost Associates on behalf of TNC. The comment document details TNC's recommended changes, clarifications, and minor technical corrections to be incorporated into the TWDR and TSO. The suggested modifications are listed in the order of which they appear in the TWDRs and TSO, respectively. TNC respectfully requests that the recommended revisions outlined in the attached document be incorporated into the TWDRs prior to adoption.

If you have any questions regarding TNC's comments, please contact me at (415) 543-3007 or Ms. Kathryn Gies from West Yost Associates at (925) 461-6795.

TNC Holding Company, LLC

By: 
Mr. Tom C. Trauger,
Its General Manager

c.c. Mr. Anand Mamidi, California Regional Water Quality Control Board
Ms. Kathryn Gies, West Yost Associates
Mr. Thomas Berlinger, Duane Morris, LLP

**COMMENTS ON THE
TENTATIVE WASTE DISCHARGE REQUIREMENTS AND
TENTATIVE TIME SCHEDULE ORDER
FOR THE TNC HOLDING COMPANY, LLC AND THE
RALPH F. NIX 1995 REVOCABLE TRUST
TNC HOLDING COMPANY CAVIAR STURGEON FARM
SACRAMENTO COUNTY
NPDES NO. CA0085120**

WASTE DISCHARGE REQUIREMENTS

1. Page 10, Effluent Limitations and Discharge Specifications (IV), Table 6 - Ammonia Effluent Limitations

It does not seem reasonable to apply ammonia criteria to the receiving water that is based on waters where salmonids and early life stages are present. As documented in the Tentative Order, the receiving water is a drainage ditch that often does not contain water absent the discharge. Moreover, the discharge is intermittent, so there are many times throughout the year when the ditch has no water in it at all. Given these conditions, there is no reason to expect that salmonids would be present at or near the point of discharge. Therefore, it is requested the limitations for Ammonia-Nitrogen be modified as follows:

- AMEL: 1.6 mg/L
- MDEL: 3.2 mg/L

2. Page 19, Provisions (VI), Special Provisions Item C.1.c – Discharge of Aquaculture Chemicals

TNC requests that the permit be modified to allow for the application of hydrogen peroxide to the fish rearing tanks. Hydrogen peroxide always decomposes into water and oxygen gas spontaneously. Therefore, the use of this chemical in the process does not pose a threat to water quality. The following change is requested:

- c. Discharge of Aquaculture Chemicals.** This Order may be reopened to include additional prohibitions, effluent limitations or other discharge requirements in the event that the Discharger submits the required information under Section VI.C.2.a of this Order for the discharge of aquaculture chemicals or drugs in addition to salt and hydrogen peroxide.

3. Page 19, Provisions (VI), Special Provisions C.2.a – Aquaculture Chemicals or Drugs

The following change is requested:

- a. **Aquaculture Chemicals or Drugs.** This permit authorizes the discharge of salt in accordance with the effluent limitations, BMP plan requirements, monitoring and reporting requirements and other conditions of this permit. In addition, this permit allows the use of hydrogen peroxide, which breaks down to water and oxygen gas, in the fish rearing tanks. Other aquaculture chemicals or drugs that may enter the wastewater discharge can only be authorized if the Discharger submits a report of waste discharge (RWD) to the Central Valley Water Board and the Central Valley Water Board reopens and revises this Order. The RWD must include, at minimum, the following information:

4. Page 20, Provisions (VI), Special Provisions C.3.a – Best Management Practices

The previous owner developed the BMP plan dated August 22, 2005. There are a number of BMPs outlined in this manual that are not applicable to the Facility. Therefore, TNC requests time to develop a new BMP manual for the Facility. The following, specific changes are requested:

- a. **Best Management Practices (BMP).** ~~Within 30 days of adoption of this Order, the Discharger shall certify in writing to the Central Valley Water Board that it has incorporated best management practices described in the BMP plan dated 22 August 2005.~~ Within 6 months of adoption of this Order, the Discharger shall submit an updated BMP plan for approval. The updated BMP plan must be consistent with the following objectives:

5. Page 22, Provisions (VI), Special Provisions C.3.b – Storm Water

The State Water Board's General Permit to Discharge Storm Water Associated with Industrial Activity (Water Quality Order No. 97-03-DWQ) is intended to cover all new or existing storm water discharges and authorized non-storm water discharges from facilities required by Federal regulations to obtain a permit. However, the NPDES Industrial Storm Water Program does not regulate storm water discharges from Concentrated Aquatic Animal Production Facilities or Fish Hatcheries. Therefore, it is not appropriate to require that TNC obtain coverage under the Storm Water permit.

Nevertheless, in accordance with the Concentrated Aquatic Animal Production (CAAP) facility effluent guidelines (and the BMP submittal requirement under Provision VI.C.3.a), TNC is required to ensure the storage and containment of drugs, chemicals, fuel, waste oil, or *other materials* to prevent spillage or release into the aquatic animal production facility, surface waters, or groundwater. To meet this BMP, TNC plans to further consolidate equipment kept in the storage area and dispose of any materials that are not needed for operation of the Facility or that may result in such releases. In addition, TNC will be develop and implement the improvements needed to manage and contain runoff from the equipment storage area. This strategy may involve relocating the equipment to a site closer to the runoff control basin identified in the proposed revised Attachment C Flow Schematic. These proposed BMPs will be documented in the BMP Plan required in accordance with Provision VI.C.3.a.

For the above reasons, TNC requests that Provision VI.C.3.b be removed from the permit.

6. Page 22, Provisions (VI), Special Provisions C.4.a – Solids Disposal Specifications

In a recent letter from the Regional Board, it was brought to TNC's attention that the current water hyacinth dewatering and composting practices are not consistent with the *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, et eq. TNC is concerned that the Regional Board is, in this case, attempting to regulate the water hyacinths plant material as a designated solids waste under Title 27.

The growth, removal, and disposal activities for the water hyacinths plant material would be the equivalent to the practices associated with a land treatment (or land application) facility where nutrient rich water is used to irrigate a crop and crop nutrient uptake provides treatment of the water as it moves into the groundwater. It is our understanding that operations that practice land application are not required to manage the plant material grown in the land application area as a designated solid waste.

Moreover, in accordance with the CAAP BMP requirements outlined in Provision VI.C.3.a, the storage and disposal activities of harvested water hyacinths or duckweed "must be carried out in an environmentally safe manner so as to prevent any nuisance conditions caused from storing on-site." The CAAP BMP requirements also require that TNC "Report the final disposition of all *other* solids and liquids, including aquaculture drugs and chemical not discharged to surface waters in the effluent."

Given this guidance, it does not seem reasonable to regulate the plant material harvested from the treatment ponds in the same manner that the other solids are regulated. Moreover, in accordance with Provision VI.C.3.a, TNC will submit a BMP Plan that documents the practices that will be employed to store and dispose of the plant material in a manner that avoids nuisance conditions. Compliance with this provision should be adequate to ensure the CAAP BMPs are satisfied.

For the above reasons, the following specific modifications are requested to provide clarity:

- i. Collected screenings, sludges, and other solids, including fish carcasses but not including water hyacinths and duckweed, shall be disposed of in a manner approved by the Executive Officer and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.
- ii. The discharge of solid waste to lands not owned or controlled by the Discharger, or in a manner not approved by the Executive Officer, is prohibited.
- iii. Collected water hyacinth and duckweed shall be disposed of in a manner that is consistent with the Regional Board staff approved Best Management Plan developed in accordance with Provision VI.C.3.a.
- ~~iii~~.iv. Any proposed change in solids disposal from a previously approved practice (as described in this Order) shall be reported to this office at least 90 days in advance of the change.

ATTACHMENT C - FLOW SCHEMATIC

7. As discussed herein, TNC proposes to construct a second water hyacinth drying area and utilize an existing onsite basin as a storm water catchment area. A revised Flow Schematic is attached to this document that reflects the proposed changes.

ATTACHMENT E – MRP

8. Page E-4, Influent Monitoring Requirements (III) - Typo

The following changes to this section are needed:

III. INFLUENT MONITORING REQUIREMENTS — NOT APPLICABLE

A. Monitoring Location INF-001

1. The Discharger shall monitor the process supply water obtained from two wells located in the southeast corner of the Facility. Monitoring of this source water shall be conducted after treatment in the degassing/aeration tower at Monitoring Location INF-001 as follows:

Table E-2. Influent Effluent Monitoring

9. Page E-10, Reporting Requirements (X), Item D.2 – Annual Solids Disposal Report

As discussed above, TNC is concerned that the water hyacinths and duckweed plant material that is harvested from the pond treatment system is not being properly regulated in accordance with the CAAP guidelines. Specifically, the CAAP BMP requirements also require that TNC “Report the final disposition of all *other* solids and liquids, including aquaculture drugs and chemical not discharged to surface waters in the effluent.” (As noted above, this requirement is listed after a requirement specific to the management of water hyacinths and duckweed.) Given this guidance, it does not seem reasonable or appropriate to require annual reporting of the management activities of this plant material. Finally, in accordance with Provision VI.C.3.a, TNC will submit a BMP Plan that documents the practices that will be employed to store and dispose of the plant material in a manner that avoids nuisance conditions. Compliance with this provision should be adequate to ensure the CAAP BMPs are satisfied.

The following specific changes are requested:

2. **Annual Solids Disposal Report.** An annual solids disposal report shall be submitted with annual self-monitoring reports. The report shall describe the annual volume of solids generated by the Facility ~~including harvested water hyacinths and duckweed~~, and specify the disposal practices. The Discharger is not required to submit reporting information regarding the water hyacinths and duckweed harvested from the treatment ponds as long as the disposal practices are consistent with the approved BMP Plan developed in accordance with Provision VI.C.3.a of this Order.

10. Page E-11, Reporting Requirements (X), Item D.3 – Drug and Chemical Use Reports

Given the limited use of chemicals at the Facility, TNC requests that the Drug and Chemical Use Reporting requirement be changed from Quarterly to Annually.

3. ~~Quarterly~~ **Annual Drug and Chemical Use Report.** The information listed below shall be submitted for all aquaculture drugs or chemicals used at the Facility. This information shall be reported at annual ~~quarterly~~ intervals and submitted with the annual ~~quarterly~~ self-monitoring reports using the drug and chemical usage report table found in Attachment I of this Order. At such time as the Discharger is required to begin submitting self-monitoring reports electronically, it shall submit the annual ~~quarterly~~ drug and chemical use reports as a pdf attachment.

ATTACHMENT F – FACT SHEET

11. Page F-4 and F-5, Facility Description (II)

TNC requests that the Permit specifically allow the use of hydrogen peroxide. Therefore, the following change is requested in the fact sheet:

The Facility is located approximately 0.8 miles southwest of Wilton, California (Sacramento County) within Assessor's Parcel Numbers (APNs) 134-0173-013 and 134-0173-014, as shown in Attachment B. TNC Holding Company, LLC, uses and occupies 10 acres owned by the former operator, Tsar Nicoulai Caviar, LLC, subject to a deed of trust in favor of TNC Holding Company, LLC; and TNC Holding Company, LLC leases the additional adjacent five acres from the Ralph F. Nix 1995 Revocable Trust on which the Facility's treatment pond is located.

According to the prior Discharger's ROWD, the Facility raises white sturgeon (*Acipenser transmontanus*) for sale as fresh and smoked meat, and for caviar. The Facility, while under the ownership and control of the prior operator, reported production of 210,000 pounds of white sturgeon in 2009, with approximately 22,000 pounds of food used during the month of maximum feeding (August). Under the NPDES program, the Facility is considered a concentrated aquatic animal production (CAAP) facility.

The wastewater discharges from the Facility include unused food, fish excrement, and algae. The Discharger currently uses sodium chloride (salt) and hydrogen peroxide to control fish infections from surface abrasions and the spread of fish disease. According to the ROWD the Discharger does not currently use or plan to use any other aquaculture chemicals or drugs in its operations.

12. Page F-5, Facility Description (II), Item A – Description of Wastewater and Biosolids Treatment or Controls

TNC has the following concerns regarding this section:

- The description of the treatment system is not accurate and some minor changes are needed.
- The historic monitoring records indicate that the pond system is capable of adequately meeting the permit requirements during short periods when the drum filters are down for maintenance or repairs. This is because the small amount of solids entering the U-shaped pond during the short maintenance periods will settle to the bottom where they will eventually be degraded. Standard Provisions I.D. requires operation of backup equipment or auxiliary facilities only when necessary to achieve permit compliance. Given the Facility can achieve permit compliance when the drum filters are offline (as documented in previously submitted self-monitoring reports), it seems unreasonable to expect that the drum filters will be operational at all times or that TNC install redundant or back-up equipment. Therefore, TNC requests that language be included in the Order that acknowledges that the drum filters may be offline for brief periods of maintenance or repair.
- TNC is concerned that the Regional Board is improperly regulating the disposal practices for the water hyacinths and duckweed, which are plant materials that are a byproduct of the pond treatment system.
- TNC requests that the permit provide the option to dispose of the solid waste that is generated at the Facility (i.e. solids collected through the filtration system, as well as other process solids like fish carcasses) at any permitted land application or landfill facility in accordance with the permit for that site.

Accordingly, the following specific changes are requested:

Process supply water is obtained from two wells located in the southeast corner of the Facility. The combined capacity of the two process supply wells is 890 gallons per minute. The supply water passes through a degassing/aeration tower before it is mixed with process re-circulation water and fed to the fish tanks. Up to 90 percent, on a long-term basis, of the Facility's process wastewater will be re-circulated.

Facility source water from the degassing/aeration tower flows to a return canal where it mixes with re-circulated wastewater. The water is then pumped through an underground distribution matrix to eighteen 50-ft diameter lined steel grow-out tanks. Wastewater from the grow-out tanks, containing fish excrement and unused food, is discharged ~~via~~ a drainage canal to three large drum filters ~~to~~ that remove particulates down to 60 micrometers. Sludge from the drum filters is collected in four settlement tanks configured in series. After filtration, wastewater is channeled through a 2.7 million gallon, U-shaped pond containing aquatic vascular vegetation for direct nutrient uptake and settling. Residual ammonia and dissolved organics are removed by a media based biofiltration system placed within the U-shaped pond. During short periods when the drum filters are offline for repair or maintenance, wastewater can directly enter the U-shaped pond, where solids will settle to the bottom and eventually be degraded. Treated wastewater from the pond is routed to the return canal. ~~and~~ From the return canal water can be directed through two post treatment ponds (#1 and #2) for further nutrient removal and temperature modification prior to being re-circulated to the return channel. Water can also be pumped from the return canal into the distribution matrix where it is can be: (1) discharged through Discharge Point No. 001, (2) sent directly back to the fish tanks as described above, or (3) sent through two post treatment ponds (#1 and #2) for further nutrient removal and temperature modification prior to being re-circulated to the grow out tanks. Water is discharged from the distribution matrix described above on an as-needed basis to control system water levels and temperatures in the grow out tanks.

Less than 300 pounds per day of solid waste is accumulated through the filtration system and is dewatered in the four plastic settlement tanks. After dewatering, the sludge collected in the filtration system, as well as other process solids (like fish carcasses), are transported off-site to a disposal facility (either a permitted landfill or land application site).

Aquatic plants (500,000 lbs) harvested from the treatment pond are currently dried and composted on-site ~~dried~~ in a 2,500 square foot unlined drying beds located on a 2 acre parcel of the Facility's farm adjacent to the return canal. Runoff from this drying area is directed to the return canal and receives treatment in the pond system. The Discharger is in the process of constructing a second unlined drying bed and composting area for plant material harvested from the treatment ponds. The runoff from this drying area will be directed to an onsite containment basin. After composting, the harvested plant material is used onsite as a soil amendment. The sludge (146,000 gallons/year) and aquatic plants (500,000 lbs) cleaned from the pond are dried on-site and transported off site for disposal at the Keifer Road Landfill.

13. Page F-6, Facility Description (II), Item D – Compliance Summary

TNC requests the following modifications to this section:

~~The Central Valley Water Board issued three Administrative Civil Liability (ACL) Complaints against the prior Discharger/operator/owner during the previous permit term. The current Discharger is not responsible or liable for the violations addressed in these ACL Complaints. ACL Complaint R5-2008-0575 recorded two effluent limitation violations, and determined one to be a serious violation (violation of iron limitation) and assessed a mandatory minimum penalty of \$3,000. ACL Complaint R5-2009-0517 recorded three effluent limitation violations, and determined one (violation of iron limitation) to be a serious violation and assessed a mandatory minimum penalty of \$3,000. ACL Complaint R5-2010-0511 recorded seven effluent limitation violations, and determined two to be serious violations (violation of iron limitation) and five to be non-serious violation (violation of ammonia and manganese limitations) and assessed a mandatory minimum penalty of \$12,000.~~

14. Page F-10, Rationale for Effluent Limitations and Discharge Specifications (IV), Item A.2

TNC requests the following modifications to this section:

Fish raised in CAAP facilities may become vulnerable to disease and parasite infestations. Various aquaculture drugs and chemicals may be used periodically at CAAP facilities to ensure the health and productivity of the confined fish population, as well as to maintain production efficiency. Aquaculture drugs and chemicals may be used to treat fish for parasites, fungal growths and bacterial infections. Also, aquaculture drugs and chemicals are sometimes used to anesthetize fish prior to spawning or "tagging" processes. The Discharger confirmed in the ROWD submittal that salt and hydrogen peroxide are ~~is~~ the only chemical additives that will be used at the Facility. Hydrogen peroxide will decompose into water and oxygen. Therefore, this Order prohibits the use and discharge of aquaculture drugs and chemicals, other than salt, from the Facility without first submitting a ROWD and receiving a permit authorizing the discharge from the Central Valley Water Board.

**15. Page F-20, Rationale for Effluent Limitations and Discharge Specifications (IV),
Item C.3.c.i – Ammonia**

The following modifications are requested:

i. Ammonia

(a) **WQO.** The NAWQC for the protection of freshwater aquatic life for total ammonia, recommends acute (1-hour average; criteria maximum concentration or CMC) standards based on pH and chronic (30-day average; criteria continuous concentration or CCC) standards based on pH and temperature. USEPA also recommends that no 4-day average concentration should exceed 2.5 times the 30-day CCC. USEPA found that as pH increased, both the acute and chronic toxicity of ammonia increased. Salmonids were more sensitive to acute toxicity effects than other species. However, while the acute toxicity of ammonia was not influenced by temperature, it was found that invertebrates and young fish experienced increasing chronic toxicity effects with increasing temperature. ~~Because the~~ The Cosumnes River has a beneficial use of cold freshwater habitat and the presence of salmonids and early fish life stages in the Cosumnes River is well-documented. However, the discharge from the Facility is to a storm water ditch that is located several miles upstream of the Cosumnes River. Therefore, the recommended criteria for waters where salmonids and early life stages are present are not applicable to this discharge. were used. The maximum permitted effluent pH is 8.5, as the Basin Plan objective for pH in the receiving stream is the range of 6.5 to 8.5. In order to protect against the worst-case short-term exposure of an organism, a pH value of 8.5 was used to derive the acute criterion. The resulting acute criterion is ~~3.22-14~~ mg/L. Paired effluent data for temperature and pH were used to calculate the 30-day CCC. This was done based on 490 samples taken between 1 May 2009 and 31 March 2011. The lowest 30-day CCC calculated during this period was 1.56 mg/L as N and was based on a paired 30-day average pH of 8.1 and 30-day average temperature of 19.4°C, which occurred from 20 September 2010 to 19 October 2010. The 4-day average concentration is derived in accordance with the USEPA criterion as 2.5 times the 30-day CCC. Based on the 30-day CCC of 1.56 mg/L (as N), the 4-day average concentration that should not be exceeded is 3.90 mg/L (as N).

(b) **RPA Results.** Untreated Cold Water Concentrated Aquatic Animal Production Facility discharges contain ammonia. Nitrification is a biological process that converts ammonia to nitrite and nitrite to nitrate. Inadequate or incomplete nitrification may result in the discharge of ammonia to the receiving stream. Ammonia is known to cause toxicity to aquatic organisms in surface waters. Discharges of ammonia in toxic

concentrations would violate the Basin Plan's narrative toxicity objective. The MEC for ammonia was 0.68 mg/L. Although the effluent does not exceed the applicable water quality objectives for ammonia, Section 1.3, Step 7, of the SIP, allows that WQBELs can be required based on other information. If not properly treated, wastewater from CAAP facilities may contain ammonia in concentrations that may cause or contribute to an exceedance of the Basin Plan's narrative toxicity objective. Hence, WQBELs for ammonia are included in this Order.

(c) **WQBELs.** The Central Valley Water Board calculates WQBELs in accordance with SIP procedures for non-CTR constituents, and ammonia is a non-CTR constituent. The SIP procedure assumes a 4-day averaging period for calculating the long-term average discharge condition (LTA). However, USEPA recommends modifying the procedure for calculating permit limits for ammonia using a 30-day averaging period for the calculation of the LTA corresponding to the 30-day CCC. Therefore, while the LTAs corresponding to the acute and 4-day chronic criteria were calculated according to SIP procedures, the LTA corresponding to the 30-day CCC was calculated assuming a 30-day averaging period. The lowest LTA representing the acute, 4-day CCC, and 30-day CCC is then selected for deriving the AMEL and the MDEL. The remainder of the WQBEL calculation for ammonia was performed according to the SIP procedures. This Order contains a final AMEL and MDEL for ammonia of 1.609 mg/L and 3.224 mg/L, respectively, based on the acute criterion value.

(d) **Plant Performance and Attainability.** Analysis of the effluent data shows that the MEC is less than the WQBELs. The Central Valley Water Board concludes, therefore, that immediate compliance with these effluent limitations is feasible.

16. Page F-30, Rationale for Monitoring and Reporting Requirements (VI), Item E.1 – Solids Disposal Monitoring

As discussed previously, it does not seem reasonable to regulate the plant material harvested from the treatment ponds as a designated waste. In addition, the federal CAAP BMP guidelines do not include reporting of the management activities of this plant material.

Secondly, solids generated from the Facility will be disposed offsite at a facility permitted to handle the waste. Therefore, it should not be the responsibility of TNC to evaluate whether the application of these solid wastes are at reasonable agronomic rates. This requirement would be placed on the facility where the solids are applied in accordance with the permit for that facility.

Therefore, the following changes are requested:

1. **Solids Disposal Monitoring.** This Order requires an annual solids disposal report describing the annual volume of solids generated by the Facility, ~~including harvested water hyacinths and duckweed,~~ and specifying the disposal practices. The Discharger is not required to report the disposal practices for the plant materials harvested from the treatment ponds. ~~This report must also include a certification that solids disposal methods were consistent with reasonable agronomic loading rates.~~ Solids disposal monitoring is required to evaluate compliance with Construction, Operation, and Maintenance Specifications, Section VI.C. 2.e, of Limitations and Discharge Requirements of this Order.

TIME SCHEDULE ORDER

17. Page 2, Item 9, typo

By statute, a Time Schedule Order may provide protection from MMPs for no more than five years. Compliance with this Order only exempts the Discharger from mandatory penalties for violations of the final effluent limitations for iron. Protection from MMPs for the final effluent limitations for iron begins immediately, and may not extend beyond 1 December 2016. CWC section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to section 13263.3 of the California Water Code. Therefore, a pollution prevention plan will be necessary for ~~copper and lead~~ iron in order to effectively reduce the effluent concentrations by source control measures.

18. Page 3, Item 10, typo

Since the time schedule for completion of action necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes an interim requirement and date for achievement. The time schedule does not exceed 5 years.

The compliance time schedule in this Order includes an interim performance-based limitation for iron. In developing performance-based interim limitations, where there are 10 sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row). Therefore, the interim limitations in this Order are established as the mean plus 3.3 standard deviations of the available data.

The final effluent limitations for iron in Order R5-2011-XXXX are established as a calendar annual average effluent limit. To be consistent with the averaging period of the final effluent limitation the interim performance-based effluent limit included in this Order has been established as an calendar annual average and was calculated using the running annual average iron concentrations using monthly data collected between November 2005 and May 2010. The following table summarizes the calculations of the ~~daily maximum~~ interim effluent limitation for iron:

ATTACHMENT C – FLOW SCHEMATIC

