

**From:** Doug Culbert  
**To:** [NorthCoast](#)  
**Cc:** [Merritt Perry](#); [Randy Mendosa](#); [Thorme, Melissa](#); [Dougherty, Mona@Waterboards](#); [McSmith, Justin@Waterboards](#)  
**Subject:** R1-2017-0005\_Fortuna\_Permit\_comments  
**Date:** Wednesday, December 14, 2016 3:49:40 PM  
**Attachments:** [image001.gif](#)  
[EXHIBIT A-wwwtp discharge and sample points.pdf](#)  
[EXHIBIT B-R1-2017-0005\\_Fortuna\\_Permit\\_comments.docx](#)  
[EXHIBIT C-Comment Narrative.pdf](#)  
[Fortuna Cover letter.pdf](#)

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Please find attached the official comments for Fortuna's Draft R1-2017-0005 Permit. Also attached is a cover letter and supporting documentation for our comments. Included with the narrative of our comments are numbers that coincide with the comment numbers on the red line version which is also attached. Please don't hesitate to contact me if you have any further questions or inquiries. Thank you.

*Doug Culbert*



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December 14, 2016

Justin McSmith, Water Resources Control Engineer  
North Coast Regional Water Quality Control Board  
5550 Skylane Blvd., Suite A  
Santa Rosa, CA 95403

Via Email: [NorthCoast@WaterBoards.ca.gov](mailto:NorthCoast@WaterBoards.ca.gov)

Dear Justin:

The City of Fortuna (City) would like to thank the Board for giving us the opportunity to review and provide comments on the draft NPDES permit for the City's wastewater treatment plant discharges. This new permit reclassifies the City's percolation ponds into NPDES discharges and adds new, very stringent effluent limitations. The City will need time to upgrade our treatment plant to meet these limits year round. Therefore, the City asks that a compliance schedule be provided in the permit instead of in a companion Cease and Desist Order (CDO) or Time Schedule Order (TSO), which provide no protection from citizen lawsuits for permit violations that might occur while the City is constructing new treatment upgrades. We have provided specific permit language in the attached redline version of the permit to assist your staff with fulfilling this request.

We also have made other specific requests including, but not limited to, the following:

- Providing dilution credits in the water quality based effluent limitations since discharge is only allowed when there is 100:1 dilution (e.g., when the City's discharge is 1% of river flow).
- Removal of all references to the Test of Significant Toxicity (TST), which is not part of the approved chronic or acute toxicity test methods and statistical procedures allowed in federal regulations.
- Removal of daily maximum limitations where set to protect long term chronic criteria or to protect drinking water since those criteria are set to protect people drinking that source for 70 years, and no one downstream of Fortuna is using the Eel River as a drinking water source.
- Removal of internal monitoring for chlorine residual, which is unnecessary as long as the City meets its disinfection (coliform) requirements. Under state law, the Water Board cannot tell the City how to comply or regulate the internal workings of the plant.
- Reducing the monitoring locations to a single location since there are now no differences in the treatment for land or water discharge. We have provided a new map with latitude and longitude indicated for the monitoring and discharge locations that should be incorporated into the permit. *See Exhibit A.*

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Each of these requests, and others, are included with narrative explanations in the redline/  
strikeout version of the draft permit. *See Exhibit B.* For the ease of your staff in responding to  
these comments, we have also provided **Exhibit C**, which is a listing of each of the issues raised  
in the redline version.

We are available to discuss these issues with your staff prior to the hearing on this permit in  
hopes of having positive changes made so we can have our permit heard on the consent calendar.

Respectfully submitted,



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cc: Merritt Perry, City Engineer/Public Works Director, City of Fortuna  
Randy Mendosa, Interim City Manager, City of Fortuna  
Melissa Thorne, Downey Brand LLP  
Mona Dougherty, Senior Water Resources Control Engineer



# City of Fortuna Wastewater Treatment Plant Discharge and Sampling Points



**Data Sources:**  
2010 Aerial Orthophoto  
Humboldt County Parcel GIS  
OSM Streets  
Created On:  
12/12/2016

**Disclaimer:**  
City of Fortuna assumes no liability for errors, omissions, or inaccuracies of information provided. Mapping and data provided are for planning purposes only

## EXHIBIT C

1. Table 2 Discharge Locations; Discharge Points GPS locations do not represent actual location. See attached map. There's a difference between Monitoring points E-001/E-003 and Discharge Point 001/003. E-001/003 is located up near the operations building where the valves are that switch locations but the Discharge points are at Strongs Creek and the Percolation ponds.
2. **Table 3 Administrative Information:** The Order effective date should be April 28th under the 1989 MOU with EPA.
3. **Section II.A:** Editorial changes. The highlighted part of the sentence duplicates the next sentence and should be kept separate to describe federal and state law distinctly.
4. **Section II.C:** All of section III is state law requirements. None are required by CWA or federal regulations;
5. **Section II.C:** More than just subsection B are state law requirements.
6. **Section III.A:** You cannot disclose an unplanned or emergency discharge, and these discharges are covered by other prohibitions.
7. **Section III.E:** This duplicates III.B and III.D. and is not necessary.
8. **Section III.G:** This duplicates III.A. and does not need a separate prohibition.
9. **Section III.H:** Regarding the 1.5 MGD maximum, This is a parameter the City has no control over. This could cause upsets to the treatment process if we divert the excess and bring it back later. It will have to be treated at one time or another. Flow is not required to be regulated under federal law, and in fact case law disallows EPA from regulating flow. Thus, there is no federal law reason for including this requirement. In addition, the reason in the fact sheet for this is to maintain compliance with effluent limits. However, the Water Boards cannot prescribe the manner of compliance under Water Code section 13360(a). Because the flows cannot be controlled, the effluent limits on constituents of concern should control. This requirement should be removed.
10. **Section III.I:** This language should be clarified to prohibit only direct discharges.
11. **Section III.J:** Please clarify how discharges can be adjusted daily. This should be on average over a month only.
12. **Section IV.A.1a:** There should just be one effluent monitoring location since there is no difference in requirements as in the last permit. Samples can be taken after dechlor, but before discharge to Creek or ponds. No need for 2 separate samples to be taken.
13. **Table 4. Effluent Limitations:** Because discharges are only allowed when effluent is 1% of the flow, the water quality-based limits should reflect dilution credits up to 100:1 dilution. In addition, for the human health criteria, these should only be monthly average limits because there is no acute need for a daily or short term limit because those criteria are set for 70 years of exposure. Finally, there is no MUN use downstream of this discharge, so there is no need to include effluent limitations to protect MUN.
14. **Section IV., Table 4:** Limits for POTWs are supposed to be monthly and weekly averages. The Fact Sheet does not explain why weekly averages are impracticable as required by 40 C.F.R. §122.45(d)(2).
15. **Section IV., Table 4:** There is no reasonable potential (RP) for CDBM. None of the 29 samples taken during the term of Order No. R1-2011-0004 detected CDBM. The fact that chlorination is used does not change the fact that there is no RP. If detected, then there is a reopener in Section VI.C.1.b. that would allow an effluent limit to be inserted at that time.
16. **Section IV., Table 4:** There was found to be reasonable potential for Heptachlor Epoxide based on one sample in a five year period. There are a lot of variables that play into this result being above the MCL such as lab error, equipment error, acute shock load. We suggest that a footnote be added that this limit will not apply until 1.1.18, so that we can have another year of continued monitoring for a 12 month period (which the City can begin next year before the permit is adopted) and that this limit will only apply if another sample above the criterion occurs.

- a. Note the addition of #3 on the Table Notes.
17. **Section IV., Table 4:** Rio Dell has only monthly total nitrogen and this should same.
  18. **Section IV.A.1.c:** How would you measure discharges to the Eel here? Should this be to the ponds?
  19. **Section IV.A.1.d:** There is no discussion that there is reasonable potential for acute toxicity. Without reasonable potential, there is no requirement for an acute toxicity limit and it should be removed. Water is protected by V.A.12., and a reopener is available in Section VI.C.1.c. if reasonable potential exists in the future.
  20. **Section IV.A.1.d:** Since there will be quarterly sampling events we assume we would do two in the winter(001) and two in the summer(003)?
  21. **Section IV.A.1.e:** It is not clear that there is reasonable potential for chronic toxicity since there was only one issue related to foaming that was resolved. Without reasonable potential, there is no requirement for a chronic toxicity limit and it should be removed. Water is protected by V.A.12., and a reopener is available in Section VI.C.1.c. if reasonable potential exists in the future. Further, the TST is not an approved statistical method for determining toxicity contained in the 2002 Methods formally adopted by USEPA and there is no longer an approved Alternate Test Procedure (ATP) as recognized by the Fact Sheet. Monitoring must be based on Part 136 methods. 40 C.F.R. §122.41(j)(4); §122.44(i). The permit should maintain the trigger approach based on TUC mandated by the State Water Board in 2003 that is still binding and precedential
  22. **Section IV.A.1.e:** Receiving water is required for this test. Do we sample in the summer during low river flows?
  23. **Section IV.C.:** The previous section is not numbered, so these should be consistent.
  24. **Section IV.D.:** It needs to be clear that these requirements do not constitute effluent limits and are not subject to MMPs
  25. **Section IV.D.1.:** The 1.5 mg/L minimum was removed in favor of this language "the total residual chlorine concentration shall be maintained at a level that ensures the discharge meets the total coliform effluent limitation at the end of the disinfection process for discharges" It's assumed that "meets the effluent limitation" means that we pass our coliform test? If we are complying with the coliform limitation, isn't that proof that we are maintaining a level that ensures compliance. We should not need to install a continuous analyzer to demonstrate what we've already demonstrated by not failing coliform tests. This violates the Water Code prohibition on the Water Board prescribing manner of compliance under section 13360(a). The City can comply with coliform in any legal manner. Further, requiring minimum Cl residual can adversely impact ability to meet disinfection byproducts. For these reasons, these requirements should be removed.
  26. **Section V.A:** This phrase is not needed because each paragraph repeats this.
  27. **Section V.A.1:** The highest adopted number in the Basin Plan is 9, so there is no authority for 10 mg/L.
  28. **Section V.A.10:** This language should more closely track the Basin Plan language.
  29. **Section V.A.13:** This is not required by the Basin Plan. The Basin Plan at p. 3-4.00 allows a 5 degree increase in COLD waters.
  30. **Section V.A.15:** MCLs are set as annual averages for drinking water and were not initially intended to be used as Water Quality Objectives (WQOs). If used for WQOs, then they need to mirror those requirements as annual averages.
  31. **Section V.A.17:** Clarification that applies to receiving water – all others are clear on that point,
  32. **Section V.A.18:**MCLs are set as annual averages for drinking water and were not initially intended to be used as Water Quality Objectives (WQOs). If used for WQOs, then they need to mirror those requirements as annual averages.
  33. **Section V.B.1:**This is not a Basin Plan or even a true antidegradation requirement. Further, title 27 is not necessarily required for wastewater facilities otherwise in compliance. This section should be removed.

34. **Section V.B.2:** MCLs are set as annual averages for drinking water and were not initially intended to be used as Water Quality Objectives (WQOs). If used for WQOs, then they need to mirror those requirements as annual averages.
35. **Section V.B.3:** MCLs are set as annual averages for drinking water and were not initially intended to be used as Water Quality Objectives (WQOs). If used for WQOs, then they need to mirror those requirements as annual averages.
36. **Section VI. C.1.c.:** Effluent limits do not need to be numeric.
37. **Section VI. C.2.b.i.:** It is unclear why all of these studies are needed when there are no industrial users.
38. **Section VI. C.2.b.i.:** What are these pollutants?
39. **Section VI. C.3.a.i.:** If this is not currently required, can this be done through a 13267 Order instead.
40. **Section VI. C.3.a.ii(e):** If a PMP is not required does this mean the status report is not required either?
41. **Section VI. C.5.b.:** Much of this section seems duplicative of section above.
42. **Section VI. C.5.b.i.(a):** What "monitoring" is expected. We can't monitor every discharger in the City.
43. **Section VI. C.5.b.i.(c):** There are no Industrial users, so this section should be deleted.
44. **Section VI. C.5.b.i.(i):** Unclear how this was to be done without the added language.
45. **Section VI. C.5.b.i.(j):** Formatting change
46. **Section VI. C.5.c.iii.:** We've been advised by our local agency that Title 14 Div 7 of the CCR supersedes 40 CFR part 503. No mention of Title 14 Div 7 in this permit stating this. Title 14 sampling standards are more strict. I'd like to see some mention of it here so we have guidance on what regulations to perform to.
47. **Section VI. C.6.a:** This seems to be beyond the scope of a wastewater permit, and this is a reporting requirement, which should go in Attachment E, if retained.
48. **Section VI. C.7:** The compliance schedule should go in the permit, not in a separate time schedule since these are new limits not in previous permits.
49. **Section VI. C.7:** Interim Limits added that are performance-based with some extra to address water conservation and drought.
50. **Section VII.C:** Violations can only be assessed after due process and a review of the evidence to see if there are any defenses or other information to make it not a "violation."
51. **Attachment A Effective Concentration (EC):** This is unnecessary if TUC is used.
52. **Attachment A Enclosed Bays:** This is not relevant to this permit and can be removed.
53. **Attachment A Inhibition Concentration:** This is unnecessary if TUC is used.
54. **Attachment A TST:** Cannot use guidance to regulate when the regulations clearly specify the use of Part 136 methods.
55. **Figure C-3:** Clarifiers 1-3 no longer in service. Need to update the diagram
56. **Attachment D IV.C.7:** Formatting change
57. **Attachment D V.F.7:** Formatting change
58. **Attachment D V.I.4:** Format Change
59. **Attachment D VII.N:** Format change
60. **Attachment D Section VIII.:** Duplicates Section II.
61. **Attachment D Section IX.:** Duplicates Section III.
62. **Attachment D Section X.:** Duplicates Section IV.
63. **Attachment D Section XI.:** Duplicates Section V.
64. **Attachment D XI.A:** Duplicates Section V.D.
65. **Attachment D XI.B:** Duplicates Section V.E.
66. **Attachment D XI.C:** Duplicates Section V.F.
67. **Attachment D XI.D:** Duplicates Section V.G. and is not required as there are no compliance schedules in the permit.

68. **Attachment D XI.E:** Duplicates Section V.H.
69. **Attachment D XI.F:** Duplicates Section V.I.
70. **Attachment D XI.G:** Duplicates Section V.J.
71. **Attachment D XI.H:** Duplicates Section V.K.
72. **Attachment D XI.I:** Duplicates Section V.L.
73. **Attachment D XII.:** Duplicates Section VI.
74. **Attachment D XIII.:** Duplicates Section VII.
75. **ATTACHMENT E, I.A:** Do we need to get approved again for this cycle?
76. **ATTACHMENT E, I.B:** Federal regulations require the use of Part 136 methods.
77. **ATTACHMENT E, I.E:** It is unclear why Table E-1 is needed as they are listed in the SIP and apply to all CTR constituents, not just these.
78. **Table E-2:** Regarding EFF-001, There should just be one sample location since the effluent quality is the same whether it goes directly to the river or not.
79. **Table E-2:** This information about historic discharge points is irrelevant and should be removed.
80. **Table E-4:** The sampling duration is inconsistent with Section VII.B.1.d (RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS ) which states CTR monitoring will be 1x per term
81. **Table E-4 Table Note #1:** The TST is not contained in Part 136 and does not have a valid ATP, and cannot be legally used based on an unpromulgated guidance document.
82. **V.A.5:** Do we have to take all samples again for this cycle or do the previous results suffice? We've already shown which is most sensitive.
83. **V.A.6.a:** Not an approved method. Section should be deleted
84. **V.A.7:** Since there is not RP for acute, this should be a goal or trigger, not a limit.
85. **V.B.11:** The 2002 Methods prescribe use of all 5 concentrations in order to see a dose-response curve. Use of only IWC and control violates the promulgated test method
86. **V.B.13:** The methods and statistics being prescribed are not contained in the approved methods document cited
87. **V.B.18.a.i.(f)(8):** Pursuant to SWRCB Board precedential order, this is the only value that should matter and the other information only costs more to obtain and is not used for compliance, so unnecessary
88. **V.B.18.a.ii:** This is the correct approach
89. **V.C.2:** Per SWRCB precedential order, the limit is narrative and there are numeric triggers for accelerated testing.
90. **Table E-5:** Regarding Aluminum, Can this be at any time during the permit, or should the samples be at least 2 years apart?
91. **IX.A:** This should be removed and the City should just be required to meet coliform.
92. **Table E-7, Table Note #2:** The dates seem to be switched. If grabs are allowed until 2019 why are analyzers required and continuous monitoring and reporting "every hour on the hour" required by 2017?
93. **Table E-8:** Could define "twice per permit term" here.
94. **E-16, X.C.1.:** This is new. Currently we submit monthly DMRs and only during the discharge to Strongs Creek. Are we now required to submit in the summer also? And is it Quarterly rather than monthly?
95. **Table E-9:** Unclear why Source Control and Pretreatment Studies and Local Limit Study is needed.
96. **Table E-9:** What infirmities exist in the ordinance(s) that Source Control and Pretreatment Studies, Updated Sewer Use Ordinance are trying to address. The permit should not create work for work's sake if there is no problem.
97. **Table E-9:** Unclear why any of these pretreatment requirements included.
98. **Table F-1:** Change Authorized signer to Douglas E. Culbert
99. **Table F-1:** Design Flow is all that's needed.



100. **Attachment F, I.B:** Need to explain delay in permit reissuance and that current permit still applicable.
101. **Attachment F, II.A:** This is currently an issue on appeal in the County of Maui case and is unclear in the law.
102. **Attachment F, II.A(Collection System):** Only have one basin and it should be noted it's for emergency overflow not for equalization.
103. **Attachment F, II.A(Wastewater Treatment):** "Seen surfacing from groundwater" does not necessarily prove a hydrologic connection. Studies would need to be done to confirm this.
104. **Attachment F, II.A(Wastewater Treatment):** Will we be fined for effluent exceedances in the percolation ponds as long as the Time Schedule Order is in effect?
105. **Table F-2:** Because CDBM was not detected, the limit should be removed as having no RP
106. **Table F-3:** Footnote '4' is missing
107. **Factsheet F, III.C.1:** The section on Strongs Creek uses should be deleted and these two should be collapsed into one since discharges to Strongs Creek need to meet downstream requirements.
108. **Table F-4:** MUN is not an existing use downstream of Fortuna. The City is unaware of any drinking water intakes downstream. Please identify the MUN uses downstream from the WWTP
109. **Factsheet F, III.C.1:** All discharges should then get 100:1 dilution credits. There is a big disconnect in implementation of this requirement when calculating effluent limits. Limits to the ponds would also justify dilution/soil aquifer treatment credit and should not be end of pipe limits for water quality-based limits.
110. **Factsheet F, III.C.6:** A 1968 Resolution cannot incorporate a future policy.
111. **Factsheet F, III.D:** It is likely that the aluminum criteria being used is inappropriate Western waters and soils. The Central Valley has stopped using the EPA guidance criteria because naturally occurring levels prevent attainment of those criteria
112. **Factsheet F, III.E.2:** Neither are BMPs for run-on. There is no authority to add those to a wastewater discharge permit.
113. **Factsheet F, III.E.3:** This Order should not require coverage under another permit that is a separately enforceable program. This needs to be worded like the SSO WDR – that the permittee has coverage under it, but it is separate. We don't want citizen suits for biosolids issues related to a different permit under this permit.
114. **Factsheet F, III.E.5:** This Order should not require coverage under another permit that is a separately enforceable program.
115. **Attachment F, IV.A:** See notes in permit on duplicative prohibitions that are unnecessary and just create two (or three) potential violations for a single action.
116. **Attachment F, IV.A.1:** This section is mixing permit shield and notice requirements. Both apply.
117. **Attachment F, IV.B.1:** BPJ does not apply to POTWs, which are under section 125.3(a)(1). BPJ in 125.3(a)(2) applies to "dischargers other than POTWs."
118. **Attachment F, IV.B.1.b:** Providing extra justification for no mass limits.
119. **Attachment F, IV.C.2.c:** Title 22 is now being overseen by the Water Boards and implementation of Title 22 drinking water limits must be recognized on the discharge/ambient side.
120. **Attachment F, IV.C.3:** There is no impracticability analysis to justify daily limits, which are not required for POTWs, only monthly and weekly averages pursuant to 40 C.F.R. §122.45(d)(2).
121. **Attachment F, IV.C.3.a.iv:** Since the limits for chlorine and ammonia are stated to protect against toxicity, no toxicity limit is required. 40 C.F.R. §122.44(d)(1)(v). Toxicity monitoring and a narrative effluent limit and trigger are all that should be required per the State Water Board's precedential order.
122. **Attachment F, IV.C.3.a.v(a):** A daily limit is not needed for a chronic long term human health standard. A monthly or annual average would be appropriate. Also, this is different from the Rio Dell permit which only has a single limit for total nitrogen of 10 mg/L as a monthly average. Permits should be consistent and Rio Dell's is a better approach.

123. **Attachment F. IV.C.3.c:** Reasonable potential is required for all pollutants, but has not been done for toxicity, settleable solids, and other conventionals.
124. **Table F-5, Table note 1:** What dates were used for this data. Per the Woodland decision, this data should not be more than 3 years old.
125. **Attachment F. IV.C.3.c:** This shows that there is no RP for CDBM and you cannot presume it is there when the data proves otherwise.
126. **Attachment F. IV.C.3.c:** The limit for Heptachlor Epoxide should not be based on a single sample. The limit should be conditional, based on another hit in the next year.
127. **Attachment F. IV.C.5.a:** Acute Toxicity should not be maintained if no RP.
128. **Attachment F. IV.C.5.a:** We've already shown the most sensitive. Why do it again?
129. **Attachment F. IV.C.5.a:** Attachment E says QUARTERLY for acute WET monitoring.
130. **Attachment F. IV.C.5.b:** Regarding Numeric chronic toxicity effluent limitations, People consider pass/fail to be numeric limits. Because the current construct interprets the narrative that way, it essentially becomes a numeric limit, which is not allowed under the State Board's precedential order, which requires narrative limits and numeric triggers for accelerated testing.
131. **Attachment F. IV.C.5.b:** This needs to be consistent with the SWRCB's precedential order referenced herein.
132. **Attachment F. IV.C.5.c:** Endorsement is not the same as promulgation. Must use Part 136 methods and statistics.
133. **Attachment F. IV.C.5.c:** There is no valid ATP so TST cannot be legally used.
134. **Attachment F. IV.F.3.a:** This contradicts description on F-5 which states that 003 is NOT land discharge.
135. **Attachment F. IV.H.1.:** Is this number relative to conditions which can change? Sometimes a low dose is sufficient to meet total coliform effluent limitations. Will there ever be a standard or will this residual be able to fluctuate throughout the term?
136. **Attachment F. VI.B.1.c.:** Do we need to do WET if there is no toxicity present?
137. **Attachment F. VI.B.5.b.:** The City has no industrial users and has an ADWF of 1.5 mgd, not 5 mgd.
138. **Attachment F. VII.B.1.a.:** Remove monitoring for CDBM
139. **Attachment F. VII.B.1.d.:** This is inconsistent with Table E-4 which states CTR monitoring will be 2x per term