

L-3 Closed Session

TO: Humboldt County Board of Supervisors – Public Comment on Nordic EIR and litigation

My name is David Sopjes and I have been following the progress of the Nordic fish factory permitting. To help you understand the scale of the sewage waste production from this facility, based on biochemical oxygen demand (BOD), the sewage waste production from these 5million salmon is 3.9 X the sewage waste production of the citizens of Eureka, or equivalent to **175,000 humans**. This factory is **17X bigger than anything they have successfully operated**.

I have found a **discrepancy in the sewage effluent discharge limits that were used in the GHD Engineering Sewage Effluent Dispersal Model compared to the sewage effluent discharge limits that Nordic requested in their Draft NPDES permit. GHD used numbers, supplied by Nordic, for Biochemical Oxygen Demand(356lb/d) and Total suspended solids (407 lb/d) that are much smaller than what they have requested in their Regional Water Quality Control Board draft NPDES Permit(BOD=6270lb/d- 18X larger; and TSS= 1254 lb/d – 3X larger).**

In the DEIR, the results of the GHD Engineering sewage Effluent Dispersal Model concluded that there would be no significant environmental impact from the sewage effluent. This conclusion was used to dismiss the legitimate concerns expressed by NOAA Fisheries and others about Harmful Algal Blooms and Eutrophication in the discharge area. **Common sense would dictate that the Sewage Effluent Discharge limits used in the Sewage Effluent Modeling should be the same as what the factory is permitted to discharge.** If you want to test the safety of a vehicle, you don't test crash it at 5 mph when it is expected to operate at 90 mph. That would not be logical, reasonable, or prudent.

This discrepancy represents a serious problem. One solution would be to reopen the DEIR with correct sewage effluent discharge numbers (requested draft NPDES permit numbers) as input to the sewage Effluent Dispersal Model. This would mean a new period of public comment on the permitted, probably less clean, sewage effluent discharge dispersal model results. **A second solution would be to set the NPDES limits at the sewage effluent levels that Nordic has been claiming, from the beginning, that they will discharge. They claim they will remove 99% of BOD, TSS, and Phosphate as well as 90% of their Nitrogen.** You can do this by adding an amendment to Nordic's conditional use permit, submitted by Humboldt County Planning Department. That would be truly state of the art for this type of operation. If they are as clean as they claim to be, they should have no problem agreeing to these limits for their effluent discharge. This discrepancy between what Nordic says they will do and what they know they will be required to do by Regional Water Quality Control Board NPDES permit, presents an **opportunity to determine what kind of neighbor Nordic will be. If they do not agree to "put their money where their mouth is", you will know for certain what kind of neighbor they will be.** They will claim to be clean in order to be allowed into the neighborhood, but will turn out to be very dirty and we will be stuck with them for the next 50 years.

***Analysis and references regarding this Discrepancy in Sewage Discharge numbers:***

***1) From the beginning Nordic has claimed that they have a state of the art waste treatment system that will remove:***

***99% of Biochemical oxygen demand (BOD); Total Suspended solids (TS) and phosphorous(P).***

***90% of their total nitrogen (TN)***

***from figure 2.3 p31 in Project Design document Rev 2***

2) In their Project design 2 document they state that they will be releasing the following amounts each day:

- BOD 365 lbs/day (162kg/d)
- TS- 39.6 lbs/day (18kg/d)
- TN -1481lbs/day (673kg/d)
- P - 12.8lbs/day (5.8kg/d)

From Table 2.5 (p32)in Project Design document Rev 2

3) When GHD engineering evaluated the Sewage Disposal from the project they used the above numbers, supplied by Nordic , as inputs to the numerical sewage effluent dispersal model with one exception. GHD changed the 18kg of total suspended solids to 185kg. I believe the number quoted from the project design Document was a typographic error, off by an order of magnitude. The results of these inputs into the sewage effluent dispersal model showed that all the required dilution ratios were met within 5 feet of the diffuser pipe. This result was used to dismiss the valid concerns of NOAA fisheries and others about the likelihood of harmful algal blooms and eutrophication due to this amount of sewage waste being dumped into the ocean.

4) Nordic has submitted an application to the State Regional Water Quality Control board asking for sewage disposal limits based on what water quality experts expect a "land based salmon farm on the west coast" would produce. They requested these Technology Based Effluent Limits (TBEL's) because the plant does not have a track record of effluent production, since it has not been built. Their application lists effluent values for BOD and TS. The nitrogen and phosphorous in the effluent are not addressed. The only requirement is that they not contribute to nuisance algal blooms.

- BOD- 6270 lbs/day - 18X larger than what they were evaluated for by GHD
- TS - 1254lbs/day - 3X larger than what they were evaluated for by GHD and 30X what they claim in their Project Design Doc Rev2

**References:**

-The Input sewage effluent numbers for the sewage effluent dispersal modeling report are in table 3 on page 8.

-The sewage effluent discharge numbers that Nordic requested from NCRWQCB are in the Draft NPDES permit table 2 page 8.

-In the monitoring section of the DEIR, Nordic says: "Should the results of NPDES-related monitoring or additional monitoring completed by NAFC described above under Methods demonstrate water quality results that are (1) directly attributable to the Project, and (2) in conflict with the NPDES order for the Project, NAFC has the ability to immediately implement the one or more of the following operational management actions to reduce the volume of pollutants in its treated effluent discharge, in addition to any regulatory action taken by the NCRWCB to obtain compliance with the terms and conditions of the NPDES order:" DEIR page 3.9-24

***-The DEIR has a copy of their draft NPDES permit discharge limits, which they say are not expected to change when finalized. - DEIR page 3.9-9***

*"The final NPDES order would be authorized following the certification of the EIR and project approval by the County; thus, these monitoring requirements could potentially adjust in the final order subsequently approved by the NCRWQCB. The final NPDES order with final monitoring requirements would be issued following completion of the CEQA process and are anticipated to be similar to those summarized below." Table 3.9-3 page 3.9-11*

Respectfully,

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