Wheelabrator
SHASTA

Sent vis email to Aide.Ortiz@waterboards.ca.gov

April 24, 2015

Aidé Ortiz, PE
Water Resource Control Engineer
Central Valley Water Board – Fresno
1685 "E" Street
Fresno, CA 93706

Subject: Wheelabrator Shasta Energy – Comments on Tentative Draft NPDES Permit
WDID No. 5A452033001; NPDES No. CA0081957

Dear Ms. Ortiz:

Attached please find the Wheelabrator Shasta Energy Company comments regarding the above referenced permit.

If you have any questions, please contact Derrick Boom (530) 339-7627.

Sincerely,

Ralph Sanders
Plant Manager
Wheelabrator Shasta Energy Company

cc: Tentative Draft Comments

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Wheelabrator Shasta Energy Company
Items for Consideration in Tentative NPDES Permit

Comments for Consideration

	Comment	Page	Draft Permit Condition	Suggested Language
1	The Fuel Pile Storm Water Pond is proposed and not yet built. It would be best to refer to it as a proposed pond. Also, the permit should be clear that requirements relating to the proposed pond do not begin until the pond is constructed and in service.	4	Section III.I	The discharge of ~~wastewater~~ to the ~~new~~ **proposed** fuel pile storm water retention ~~area/~~pond is prohibited until the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) are satisfied, and any identified water quality mitigation measures are implemented, effective, and maintained
		14	Section VI.C.4.h.i	The retention pond and **the proposed** fuel pile storm water pond**, if built,** shall be managed to prevent breeding of mosquitoes.
		14	Section VI.C.4.h.ii	The Discharger shall operate and maintain ~~all~~ **both** ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure.
		E-9	Section VI.D.1	**When built and in service,** the Discharger shall monitor the fuel pile storm water pond at Monitoring Location PND-003, as follows, unless conditions are unsafe, in which case, the Discharger shall note in the SMRs that samples were not collected due to the conditions:
2	Please see the attached discussion regarding the Dissolved Oxygen monitoring for the Fuel Pile Storm Water Pond.	14	Section VI.C.4.h.iii	As a means of discerning compliance with Provision VI.C.4.a, above, **if** the dissolved oxygen content in the upper zone (1 foot) of the **fuel pile storm water pond** ~~wastewater in the ponds shall not be~~ **is** less than 1.0 mg/L**, then the facility will assess the odor from the pond. If odors are detected emanating from the pond then corrective actions will be taken to reduce the odors. No action would be taken if no odors are**

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				detected.
3	The term 'non-hazardous' is not well defined and could be interpreted by various regulations in different ways. The fly ash is exempted from the hazardous waste regulations and classified as non-hazardous as per Health and Safety Code Division 20, § 25143.5 - DTSC Beneficial Ash Use Exemption. However, it would be better to remove the term 'non-hazardous' from the title to avoid confusion with other regulations.	15	Section VI.C.6.a.iv	iv. ~~Non-hazardous fly~~ Ash removed from the Facility shall be: (1) Beneficially reused, such as for soil amendment; or ..... Any other use shall require approval by the Executive Officer or the Central Valley Water Board.
4	This statement is self-evident and not really necessary to be included in the NPDES permit conditions. If the fly ash were indeed hazardous (not exempt), then the management of the ash would need to be managed as per the requirements listed in Section VI.C.6.a.iv.	15	Section VI.C.6.a.v	~~v. This Order does not authorize storage, transportation, or disposal of ash or other wastes characterized as hazardous wastes. Appropriate separate regulatory coverage must be secured for such activities.~~
5	The wording is unnecessarily confusing because of the reference to storm water. Substitute wording that is similar to Table E-2, footnote 4. Please note that there will be years during which there is no upstream flow in the canal between April through November and so it is our understanding that during these periods, no samples would be taken. If this is not that case, the permit should clarify actions that must be when there is no upstream flow during the period.	E-9	Table E-8, footnote 4	Twice between April through October, when water is diverted into the Anderson Cottonwood Irrigation District Canal for irrigation and twice ~~during storm water runoff and/or other miscellaneous flows (November through March) when there is upstream flow in the Anderson Cottonwood Irrigation District Canal~~ **between November and March when there is upstream flow in the Anderson Cottonwood Irrigation District Canal.**
6	The Liming Capacity and Total Phosphorous ash monitoring requirements in this section are not relevant unless the ash is used as an agricultural soil amendment. Add a footnote to these two parameters, clarifying that they only apply to ash that is used as a	E-12	IX.D.1	Add footnote 8 to Ash Liming Capacity and Ash Total Phosphorous in Table E-13 to designate monitoring only for ash used as an agricultural soil amendment. **8 Only for ash used as agricultural soil amendment**

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	soil amendment.			
7	The area of application is only applicable for ash used as an agricultural soil amendment.	E-12	IX.D.2.b	**For agricultural soil amendment application**, area of land where ash is applied (acres); and

Corrections to Factual Errors

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8	The Fuel Pile Storm Water Pond is still in the planning stages. The practice of holding the leachate and storm water currently held within the berm and under the pile will continue until the new pond in constructed.	F-7	II.E	**To construct the pond, the** ~~The~~ Discharger proposes to move the eastern fuel pile berm to the other side of the log deck and create the new pond to the east of the fuel piles. The Discharger anticipates that the changes will occur in 2015, pending approval from the county and other agencies. **Until the fuel pile storm water pond is constructed, the leachate and storm water from the fuel pile will continue to be maintained within the fuel pile berm area.**
9	Correct the text to reflect actual practice and to match Appendix F, section II.A Note that the fuel pile storm water pond is scheduled for construction in 2015.	F-12	IV.A.4	Order prohibits discharges of leachate from wood fuel stockpiles to surface water or surface water drainage courses. Currently, leachate from the fuel pile is pumped into two soft blowdown tanks and is then used ~~for dust control and to quench~~ **to** wet fly ash **prior to shipment.** When excess leachate is generated, it is retained beneath the fuel pile by an earthen berm. The Discharger proposed a new storm water retention pond

			for the fuel pile area, which is **scheduled** ~~will be~~ **for** construction in 2015.

Dissolved Oxygen Content Discussion

See above, Related to Section VI.C.4.h.iii

Wheelabrator understands that many retention ponds have odor problems. This situation upsets neighbors and can reflect negatively on the facility and also on the Water Board's regulatory oversight. We greatly value our neighborhood relationships and our alliance with the Water Board staff. Wheelabrator and the Water Board have a common goal of assuring that our ponds do not cause nuisance odors. At issue is only how potential pond odors are best addressed in Wheelabrator's NPDES Permit.

We understand that D.O. limits have worked well at other sites, and that this is a standardized odor prevention approach. However, using D.O. as a surrogate indicator for odors may not be the best technical approach at our plant due to the nature of the site-specific conditions. We know that microbial action can create odor nuisances in anaerobic wastewaters that have a significant sulfur concentration, but it should be noted that Wheelabrator's situation is atypical in that our wood fuel has an exceptionally low sulfur concentration (typically < 0.05%). The potential for odor formation in the storm water retention pond under anaerobic conditions is greatly lessened due to the low sulfur source.

The Draft Permit proposes to use a D.O. limit in pond water merely as a surrogate indicator of nuisance odors. Failure to meet the D.O. limit does not imply any other environmental degradation. Given this situation, no negative ramifications arise from replacing the D.O. limit with some other permit-specified odor indicator. In fact, an alternative permit condition is potentially more effective for odor identification and control.

We raise concerns about the proposed D.O. limit because our Fuel Pile Storm Water Pond design could make compliance with the limit very difficult to continuously insure. This pond was engineered, in part, to maximize evaporation. We expect the pond water to become quite warm in when water levels are low. Since oxygen solubility is inversely proportional to temperature, the proposed permit limit becomes a significant portion of the maximum possible oxygen saturation in the solar-heated pond. This could result in violations of the permit

without any actual odor impact. Wheelabrator is strongly committed to environmental compliance, and we fear that compliance with the proposed pond D.O. limit cannot be continuously assured. Therefore, use of an alternative mechanism to identify and abate odors would better insure permit compliance. Continuous permit compliance is another important goal shared by Wheelabrator and the Water Board.

There are many technologies that exist, besides aeration, to address odors (e.g., enzymes, bacteriological controls, operational controls, etc.). Successful implementation of some of these technologies would not increase the D.O. concentration, but would address the odor concerns. By including the D.O. limit, the Board has effectively mandated aeration to raise the D.O. level as the solution to any odor problem. If odors in fact arise, other methods may be more effective, and/or less costly and just as effective. In which case, Wheelabrator risks demonstrating exemplary odor control while still exhibiting non-compliance with the D.O. permit condition intended to assure adequate odor control.

Rather than establishing a D.O. permit limit, we request that the D.O. value be made an "action level". For example, when the D.O. readings are less than 1 mg/L the facility would immediately assess odors at the pond. If odors are found, the facility will take appropriate corrective actions to reduce the odors. If there were no odors from the pond, no action would be required. We believe that this proposal provides an effective alternative to a "bright-line" permit-specified D.O. limit. But, if the Board deems this approach is not a viable alternative, then we ask that the board propose some other substitute permit condition(s) to address odor concerns. We share the same goals of environmental protection and neighborhood harmony. Please work with us to establish a mutually acceptable solution. We welcome the chance to further discuss other options to address potential pond odors.