

December 19, 2007

Sent Via Electronic Mail and US Mail

Mr. Andrew Lee Planning, Rule Development and Area Sources South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Re: Comments on Proposed Rule 1472 – Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines

Dear Mr. Lee:

SCAP appreciates the opportunity to comment on proposed Rule 1472 – Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines. The Southern California Alliance of Publicly Owned Treatment Works (SCAP) represents 84 public agencies that provide both water and wastewater treatment to nearly 18 million people in Los Angeles, Orange, San Diego, Santa Barbara, Riverside, San Bernardino and Ventura counties. We treat and safely reuse over 1 billion gallons of wastewater each day and deliver over 1.7 billion gallons of drinking water per day. We have reviewed the proposed Rule 1472, and have evaluated potential impacts upon our member organizations.

SCAP supports the efforts of the SCAQMD in providing clean, healthful air to the communities in the Basin. In fact, SCAP itself shares a parallel vision – to provide clean water and sanitation services for these same communities. Nevertheless, we have identified some areas of concern with this proposed rule that we would like to share with your staff. In particular, we would like to point out that use of emergency stand-by Diesel engines at many of our facilities is a de facto requirement of our operating permits. In the event of a power outage, these engines would provide a critical back-up supply of power and hence the only barrier protecting the public and the environment from exposure to untreated sewage. The operation of these engines in an actual emergency situation is already complicated by the existing limitations imposed by Rule 1470, and the imposition of the risk reduction measures of PR1472, were they to occur, would greatly increase the risk of engine malfunctioning and consequently an accidental sewage release. Additionally, we feel that the risk determination itself is

inaccurate and inflated, especially in light of the operational changes many facilities have adopted in light of Rule 1470. We conclude that publicly owned treatment facilities with mandated requirements for backup power be granted relief from the risk reduction elements of PR1472, and those facilities required to calculate risk metrics be allowed to use their **average** hours to reflect their routine and predictable activities, instead of the highly conservative permitted maximum hours.

Our comments are as follows:

Back-up Power is Critical to the Functioning of Many POTWs

The presence of stationary Diesel engines at many wastewater treatment facilities is not discretionary. Most, if not all of these facilities have a requirement for backup power written in their operating permits issued by their respective Regional Water Quality Control Boards (RWQCB). Local requirements stem from federal legislation mandating both a "Duty to Mitigate" discharges having "a reasonable likelihood of adversely affecting human health or the environment" [40 CFR Part 122.41(d)], and the follow-on requirements for "Proper Operation and Maintenance" that specifically requires "the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order" [40 CFR Part 122.41(e)].

For many facilities, permits issued by the RWQCBs reinforce federal mandates by requiring a second source of power for these facilities. Language repeated in many permits issued by the RWQCB includes:

- "...The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power."
- "...The Discharger shall provide <u>standby or emergency power facilities</u> and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur."

Although many facilities have established "preferred service" contracts with their local utilities, the delay in re-establishing power in the event of an emergency

outage could result in sewer overflows and/or reduced effluent quality (and hence a violation of a facility's RWQCB permit).

If filters were required to meet the risk-reduction elements of 1472, the existing testing and maintenance (T&M) hourly limitations of 1470 open the door for a variety of engine failure scenarios including premature filter plugging because the trapped particulates could not be baked off followed by interlock induced engine shutdown. If the power were interrupted to these facilities, raw sewage overflows and inadequately treated sewage releases to the environment would be the likely result. These events would present an unacceptably high risk of public exposure to pathogens and potentially harmful pollutants.

Emergency generators powered by stationary Diesel engines are often the only difference between keeping a wastewater plant in operation, or failing to operate and causing a public health hazard. In the event of a cataclysmic emergency such as an earthquake, the only fuel that can be rapidly and safely transported into the region is Diesel – necessitating the use of this type of engine.

Given the number of facilities involved, we hope that staff appreciates the tremendous strain on its resources if these facilities were to submit, en masse, HRAs to comply via the Rule 1402 route. We therefore request that publicly owned treatment facilities with written permit requirements for emergency power supplies be exempted from the risk reduction elements of proposed Rule 1472.

The Assumptions behind the PR1472 Risk Calculations are Inaccurate

Many facilities are able to meet the requirements of Rule 1470 without having to add a particulate filter trap to their engine exhaust. These engines typically are operated well short of their Rule 1470 reduced permitted T&M hourly limits. Nevertheless, the calculation of the Engine Group Index (EGI), a crude measure of a facility's risk potential, assumes operation up to the maximum, permitted T&M hours instead of the more realistic case of actual hours for T&M.

Requiring facilities to meet risk-reduction targets based on this grossly conservative assumption of maximum permitted T&M hours will certainly discourage facility managers from voluntarily reducing their impact by keeping their non-emergency operation hours low – <u>as they are currently doing so successfully now</u>. Additionally, an inflated EGI may cause facilities to needlessly waste literally hundreds of thousands of dollars on largely unnecessary particulate traps, diverting sorely needed funds away from other projects that will likely benefit the environment and protect public health such as improvements to the treatment process. Finally, this use would be consistent with the basis of AB2588 (H&SC Section 44303), which is to reflect activities and emissions that are "routine and predictable."

We ask, therefore, that in cases where a facility is required to calculate an EGI, that it be allowed to do so using its <u>actual</u> T&M hours averaged since the imposition of Rule 1470 without further changes to their permits.

The Risk Reduction Elements of the Rule are Prohibitively Expensive

Given the low, actual use of these emergency devices, the imposition of add-on controls or out-right engine replacements required by the risk reduction elements of PR1472 are prohibitively expensive. The costs for "fired" PM traps can reach into the hundreds of thousands of dollars for an engine that may operate less than ten hours a year. Additionally, many of these engines are so infrequently used that practically speaking they show very little wear in spite of their chronological age and would otherwise have a very long useful life. The imposition of risk reduction measures be they filters or wholesale engine replacement will involve a significant commitment in money, energy and resources that could be devoted more usefully to other efforts yielding far more environmental and public health benefits.

Conclusion

In conclusion, the imposition of risk reduction elements of PR 1472, in light of the inflated risk metric estimates, will cause many agencies to redirect significant monies and resources away from projects that would otherwise greatly benefit the environment and potentially yield much more cost-effective public health benefits. We ask that publicly owned treatment facilities with mandated requirements for backup power be exempted from the risk reduction elements of the rule, and that more realistic factors be considered in the calculation of PR1472's risk metrics.

We appreciate the opportunity to comment on proposed Rule 1472 and look forward to working with you. If you have any questions regarding this transmittal, please contact Mr. Patrick Griffith at (562) 908-4288, ext. 2117. Thank you for your consideration.

Sincerely,

John Pastore Executive Director

cc: Elaine Chang Laki Tisopulos Susan Nakamura