



Reference

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Mr. Kurt Kratz
Director of Environmental Cleanup
Office of the Deputy Under Secretary of Defense (Installations and Environment)
Department of Defense
3400 Defense Pentagon
Washington, DC 20301-3400

Re: EPA Comments on the revised Draft DoD *Interim Guidance on Perchlorate Sampling and Analysis*

Dear Kurt:

This letter provides comments on the revised draft DoD *Interim Guidance on Perchlorate Sampling and Analysis* that was e-mailed to me on August 19, 2002. Thank you for the opportunity to submit comments. While the revised draft guidance is somewhat improved over the previous version, there are still significant changes EPA believes need to be made.

A positive change from the previous version is that the revised guidance now speaks more generically to perchlorate as opposed to just ammonium perchlorate. We suggest that some examples be provided so that the Components, the regulators and the public understand clearly what constitutes a "reasonable basis to suspect the potential presence of perchlorate in the environment." The most obvious is rocket testing, but perchlorate has also been linked with high explosive and training artillery, smoke devices, pyrotechnics, and flares. Many different munitions in each of the above categories contain some form of perchlorate.

The draft DoD guidance states that there is an absence of a federal or state regulatory driver, which is not the case. The guidance should explicitly recognize that, depending on a site specific situation, the Safe Drinking Water Act (SDWA) and/or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and/or the Resource Conservation and Recovery Act (RCRA) are among the federal environmental statutes that could be brought to bear on a given situation. Should circumstances warrant such action, EPA will exercise one or more of these authorities to address any threats to human health or the environment from perchlorate contamination.



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The draft guidance fails to note that some states have issued their own advisory levels for perchlorate which should be followed by federal, state agencies or any private party involved in the evaluation and cleanup of perchlorate contamination. Moreover, some states have set their levels lower than the EPA provisional action level issued in 1999 (e.g., New Mexico and Massachusetts have advisory levels set at 1 ppb).

The DoD guidance should explicitly recognize that EPA has established a provisional reference dose for perchlorate. The "Interim Assessment Guidance for Perchlorate" issued by EPA's Office of Research and Development (ORD) on June 18, 1999 states that its guidance to EPA risk assessors and risk managers is to utilize a Reference Dose (RfD) range of 0.0001 mg/kg/day to 0.0005 mg/kg/day for perchlorate-related assessment activities. The ORD guidance further states that "... by applying the standard default body weight (70 kg) and water consumption level (2 L/day), the resulting provisional cleanup levels or action levels would range from 4-18 parts per billion (ppb)..." for adults. Levels for "at-risk" populations (infants, children, pregnant women, elderly or sick individuals) should typically be lower. Notably, consideration of more recent studies in 2000 and 2001 have resulted in a draft RfD that is lower than the concentration of the 1999 guidance¹.

Your guidance places a burden on EPA and/or the states to provide a method to improve on the sampling method for perchlorate. (see paragraph "d") This is not appropriate. Commercial laboratories, if requested, can modify Method 314.0 to obtain lower Reporting Limits without a loss of Quality Assurance/Quality Control (QA/QC). Such alterations should be done under the scrutiny of the DoD Component and the appropriate regulator. This was recently done at Massachusetts Military Reservation. At this Installation, the National Guard Bureau (NGB) requested two commercial laboratories to achieve Reporting Limits of 1.0 ug/L using Method 314.0. The laboratories quickly achieved the lower Reporting Limit (and lower Method Detection Limits of 0.35 and 0.43 ug/L), using steps which were overseen and approved by EPA and NGB contractor QA Chemists. In addition, Method 314.0 can identify lower levels of perchlorate without the presence of "false positives" if the calibration standard is lowered and the samples are purified prior to testing in order to remove other compounds that could affect the analytical results.

EPA is very concerned that the draft guidance appears to forbid a response action even where there may be a potential or actual threat to human health and the environment such as when perchlorate is in drinking water sources. The guidance states that there are no regulatory drivers (see second paragraph) and then in paragraph "g", it states that no "action beyond sampling and analysis" will be authorized "without an established regulatory driver." Following the guidance would mean that at sites where the provisional reference dose is

¹Based on these new studies by ORD, the projected imminent and substantial endangerment level set by EPA could be substantially lower than the current provisional reference dose, perhaps reaching action levels close to 1 ppb. However, it must be noted that no final determination at this level has been made.

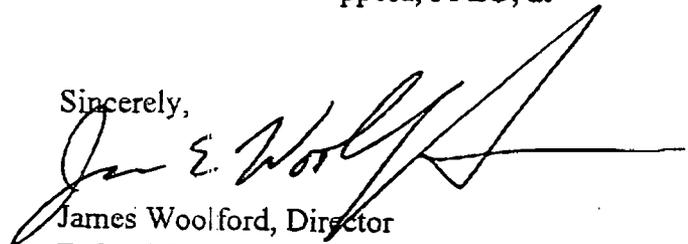
exceeded, no action would be allowed. DoD's own DENIX web site has information related to perchlorate releases to the environment. Many of the 50 "suspected sources" are related to DoD activity, namely weapons production, testing or training. Maximum concentrations of perchlorate at a few of these sites far exceed the provisional reference dose established by EPA in some cases by orders of magnitude. We do not believe it is DoD's intent to allow for the continued consumption of perchlorate-contaminated ground water. However, some could interpret DoD guidance as sanctioning that no action be taken to address releases at sites where concentrations far exceed the provisional reference dose established by EPA. This needs to be clarified to avoid any confusion.

The DoD guidance lists requirements that inappropriately impinge on EPA and state regulatory authority. The guidance continues to require a "written request" from a regulatory agency to conduct perchlorate sampling to be followed by a "written agreement". For example your guidance states that regulatory agencies provide in their request "evidence that perchlorate was released into the environment at the installation." This will clearly be a "catch-22" situation in many instances where due to historical activity, it is suspected perchlorate might be present but there is no direct evidence. Without sampling there is no way to confirm the situation one way or the other.

While EPA believes that it is appropriate to understand the basis for sampling and that there are agreed-upon approaches to conducting the sampling which can be described in a site-specific sampling plan, the requirements listed in the guidance will impose an unnecessary and perhaps unlawful barrier to EPA and state regulatory agencies carrying out their missions. If sampling is being conducted at request of a regulatory agency pursuant to a lawful access and inspection authority, the installation should provide access to such agency at reasonable times to inspect and gather samples. Where applicable, installations may request split samples to be processed and analyzed with Component funds in accordance with EPA- or state -approved or requested methods.

We hope that DoD finds these comments helpful in your review of the draft guidance and that DoD will make changes that are suggested. If you have any questions, please feel free to contact Joshua Barber, FFRRO, at 703-603-0265 or Bernadette Rappold, FFEO, at 202-564-1387.

Sincerely,



James Woolford, Director
Federal Facilities Restoration and Reuse Office

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- Maj. Jeff Cornel, Air Force
- Jack Newsome, Army
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