

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. Mark Haley, Director
Hopewell Regional Wastewater Treatment Facility
P.O. Box 969
Hopewell, Virginia 23860

Dear Mr. Haley:

The Environmental Protection Agency (EPA) would like to thank the Hopewell Regional Wastewater Treatment Facility (HRWTF) for submitting a Project XL proposal. Your ideas for the Project XL proposal include many interesting possibilities in the areas of regulatory alternatives and streamlined performance standards for both HRWTF and its industrial users. Furthermore, the EPA is very interested in working with HRWTF to achieve the superior environmental benefits described in the project proposal, particularly the nutrient reduction goals which supports EPA's goal of reducing nutrient loads in the Chesapeake Bay watershed.

EPA has conducted its technical review of HRWTF's proposal and identified some areas where additional information and clarification are necessary to complete our review of your application. In addition, we would like to provide comments on other possible improvements to the XL proposal. The comments can be found in the first attachment to this letter (Attachment 1). We have divided the comments/questions into two categories. The first are those which EPA feels must be addressed before we can make a final decision whether or not to accept the proposal as an XL project and recommend the project for Final Project Agreement development. These are marked with an asterisk. The second category concerns information EPA will eventually need if the project progresses to Final Project Agreement negotiation. The second attachment to this letter (Attachment 2) contains a more detailed analysis and recommendations from EPA on the Toxics Release Inventory reporting portion of HRWTF's proposal. The comments were compiled by a team of EPA reviewers which include: Region III, Office of General Counsel, Office of Enforcement & Compliance Assurance, Office of Reinvention, Office of Air Quality Planning and Standards, Office of Prevention, Pesticides and Toxic Substances and the Office of Water.

The third enclosure to this letter (Attachment 3) includes questions and comments from the Virginia Department of Environmental Quality (VADEQ) on your XL Project proposal. VADEQ has agreed to forward these initial comments on your proposal through EPA via this letter. For clarification

of any of VADEQ's comments, please call Michael Shelor of DEQ's Piedmont regional office at (804) 527-5032.

EPA believes that HRWTF's proposal demonstrates a great deal of potential in the areas of regulatory streamlining, multi-media pollution prevention, cost savings and paperwork reduction, as well as superior environmental performance. EPA looks forward to working with HRWTF in exploring these possibilities. Additionally, as EPA wrote previously to you on August 19, 1999, at this time AlliedSignal (Hopewell facility) and Smurfit-Stone Container Corporation are not eligible to participate in the XL project as proposed. We hope HRWTF will consider alternative means of participating in Project XL and we look forward to receiving revisions or a supplement to HRWTF's proposal that addresses EPA's comments.

Please feel free to call me at (215) 814-2092 if you need clarification of any of EPA's comments. We also suggest scheduling a conference call between HRWTF and the EPA review team to discuss these comments. Once you have had a chance to review the comments, please contact me with suggested dates for scheduling a conference call.

Sincerely,

Kristeen Gaffney
Office of Reinvention

Enclosures

cc: Robert Steidel, HRWTF
Jeanie Grandstaff, HRWTF
Michael Shelor, VADEQ
Burt Tuxford, VADEQ
Larry Lawson, VADEQ
EPA Review Team

Attachment 1

EPA's Questions/Comments on HRWTF's Project XL Proposal

Pretreatment Related Questions

- * 1) Because certain industrial users (IUs) discharging to HRWTF will directly benefit from the XL Project and will receive regulatory flexibility, EPA's Project XL screening guidance applies to these sources. At this time, because of outstanding compliance issues with Smurfit-Stone Container Corp and AlliedSignal Hopewell, both these facilities will be deferred from participation in the XL project until resolution of the noncompliance concerns. Please refer to EPA's letter to HRWTF on this matter dated August 19, 1999. Given this situation, is it technically feasible to factor out Stone's and Allied's discharges when determining HRWTF's effluent limits and the headworks analysis and user allocations? Please describe how this could be done.
- * 2) To implement this project, EPA anticipates that it will have to promulgate a set of categorical standards for the new category of eligible industrial users who discharge to HRWTF. HRWTF will be responsible for meeting the BAT standard for OCPSF (and potentially Pulp and Paper) at its point of discharge. Individual IU discharge limits will be "back-calculated" using the headworks analysis described in the proposal to enable HRWTF to meet the BAT categorical standard. Therefore, EPA expects that the headworks analysis identifying the new standard for each IU would have to be completed prior to rule proposal.
- * 3) EPA will require the IUs to remain directly accountable for the applicable categorical standards. EPA expects that the discharge limits will be included in the IUs permits or other equivalent enforceable individual control mechanism. "Contracts" or generic "enforceable agreements" as described on page 15 of the proposal do not appear to qualify as sufficiently enforceable control mechanisms.
- * 4) On page 37 of the proposal, the "voluntary performance goal" identified for meeting the OCPSF guidelines must be enforceable. EPA expects that HRWTF's responsibility for meeting the BAT standard will be enforceable through HRWTF's NPDES permit.
- * 5) Please provide more information demonstrating how HRWTF's processes qualify as equivalent to BAT. HRWTF's proposal states on page 22 that during period 1 of the FPA, "Existing pilot treatment units will be used in a study to demonstrate the technology basis for BAT as operated by the unit processes at HRWTF." What is the purpose of this demonstration? Why can't HRWTF make this demonstration now?

6) Please clarify the monitoring and reporting that the IUs will perform and that which the POTW will perform. EPA expects that the IUs will ultimately remain responsible for compliance with applicable reporting and monitoring requirements, even though HRWTF may be performing the monitoring on behalf of the IUs. For example, if Hopewell fails to conduct the minimum monitoring, the users will be liable for violations of the requirements of the General Pretreatment Regulations at 40 CFR Part 403. The General Pretreatment Regulations currently allow HRWTF to take over the monitoring responsibilities for its industrial users [40 CFR Part 403.12(g)(1)]. However, this arrangement may require revisions to the monitoring provisions and local ordinance in HRWTF's existing pretreatment program. Please provide an assessment of the changes to HRWTF's approved pretreatment program needed to implement this proposal.

7) Is HRWTF committing to set *enforceable standards* for its industrial users for all 62 pollutants under 40 CFR Part 414, Subpart I? Exactly which standards would be enforceable?

8) What subpart of the Pulp, Paper and Paperboard Guidelines is Smurfit-Stone Container Corp. subject to? If HRWTF plans to move the point of applicability for the pulp and paper standards as it is proposing to do with the OCPSF standards, EPA expects that a site specific rulemaking would be necessary for this facility as well. It may be possible to coordinate this effort with the anticipated amendments of the pulp and paper standards.

9) In period 1 of the FPA, HRWTF's proposal indicates on page 33 that it will shift the focus of its pretreatment program from an "output basis" to an "outcome basis." More specific information on this proposal will be needed before finalizing the FPA. A description of the exact regulatory and approved program elements to be changed and how they will be changed will be needed.

10) Table III.A.2 lists the baseline ranges and performance targets for the HRWTF project. However, many of these targets are listed as "Not Detected at MDL." Please define the MDLs or analytical methods.

NESHAP Related Questions

Although Smurfit-Stone Container Corp. cannot initially participate in the XL project, below are some of EPA's initial observations on the NESHAP portion of the proposal.

11) EPA believes Stone Container may not need the flexibility being requested under the Pulp & Paper NESHAP (40 CFR Part 63, Subpart S) because the NESHAP allows for this approach already. For example, Subpart S allows for a biological treatment system that reduces total HAP by \$ 92% by weight destruction. Subpart S does not specifically exclude off-site treatment. Furthermore, the proposed POTW MACT specifically would allow POTWs to act as the off-site treatment agent for industries subject to other NESHAPs. In order for EPA to determine if this is the case, please provide

a list of Stone Container's processes, materials, storage or treatment units and waste streams subject to Subpart S.

12) Can HRWTF meet the performance standard for biological treatment in Subpart S of 92% HAP reduction? Has HRWTF performed the biological treatment system monitoring specified in 40 CFR Part 63, Section 63.453(j)?

13) What are the exact specifications of the wastewater collection system at Stone Container including the transfer system to HRWTF? Schematic drawings and flow diagram with detailed descriptions of the pumping system, transfer lines, drain systems, etc. would be useful in assessing the existing system with regard to the closed collection system requirements of Subpart S. Please identify existing and proposed HAP and VOC air pollution controls along with discharge points for all waste streams.

14) The proposal discusses the re-investment of monies saved by not having to install a "hardpiping" system. What specific upgrades to the wastewater collection system are anticipated and what are the costs of these upgrades? If available, please provide a construction schedule for treatment units and other units with air pollution controls associated with these upgrades.

15) Please identify specific sections of Subpart S, other than the requirements for "hard piping", where HRWTF is proposing an alternative to the regulation.

16) Based on the anticipated POTW construction during periods 1 and 2, does HRWTF expect to trigger the reconstruction provisions of 40 CFR Part 63, Section 63.5 associated with Subpart VVV, the proposed NESHAP for POTWs?

17) How does Subpart G (NESHAP for the Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations and Wastewater) affect Hercules and AlliedSignal (Hopewell) with regard to their process wastewater requirements? Do these facilities have any substantive wastewater control requirements under this subpart? Is HRWTF acting as a certified "off-site" treatment facility for these plants? What type of wastewater collection and transfer systems exist at these plants? Does HRWTF plan to seek "equivalency" of the wastewater collection systems at these plants? Is flexibility for these requirements as they apply to Hercules and AlliedSignal (Hopewell) necessary under the proposal?

TRI (EPCRA Section 313 and PPA Section 6607) Related Questions

In addition to the comments listed below, please refer to Attachment 2 for a detailed analysis and EPA's recommendations on the portion of HRWTF's proposal that requests flexibility in Toxic Release Inventory (TRI) reporting.

18) What, exactly, is intended to be conveyed by the solid lines in the figures on pages 12 and 13 of the proposal? Are these simply releases or do they also include other waste management?

19) How will the Smurfit-Stone Container facility reporting requirements under EPCRA section 313 be affected by this proposal? Are their releases and other waste management of toxic chemicals included in either or both options?

20) Which EPCRA section 313 chemicals, specifically, are covered by the proposal? Are only those mentioned on page 26 of the proposal covered?

21) Does HRWTF currently report TRI releases? On page 5, the proposal indicates that HRWTF (voluntarily?) reports under EPCRA section 313. However, HRWTF does not seem to be in the database for 1997 reports.

Other Information Requested

23) Please provide more information on sanitary sewer overflows - where are they? Could sanitary sewer overflows occur between the IUs and HRWTF? If so, what is located in the overflow area (e.g. neighborhoods, other industries, etc) What is the status of HRWTF's sanitary sewer overflow program? Are there force-main systems for each IU?

24) The proposal states there are no worker health and safety issues. Explain how workers would be protected if there is increased flow from IUs to HRWTF?

Attachment 2

EPA's Questions/Comments on HRWTF's Project XL Proposal

EPCRA Section 313 and PPA Section 6607 Requirements

The HRWTF proposal requests that EPA allow certain industrial users (IUs) to report releases and other waste management, as required under EPCRA section 313 and PPA section 6607, as though HRWTF were an on-site treatment facility for the IU. This would be accomplished by either:

- Option 1** HRWTF becoming a separate reporter reporting in lieu of the IUs that have reportable Toxic Chemical Release Inventory (TRI) discharges to the POTW; or
- Option 2** The IUs reporting HRWTF treatment efficiencies as on-site treatment in sections 7A, 8.1 and 8.6 of the Form R.

EPA's General Concerns with the Proposal

Neither of these options meets the purposes of EPCRA section 313 and section 6607 of the PPA or accurately represent how the toxic chemical is managed. Option One may be misleading regarding where the toxic chemical in waste originated, whereas Option 2 does not accurately represent where the chemical is actually treated and/or released. In addition, the proposal as a whole seems to only address section 8 of the Form R. It is unclear how releases and other waste management of toxic chemicals will be accounted for on other sections of the Form R (*e.g.*, sections 5 and 6). Further, it seems that for Option 2 there will be significant additional burden placed on the covered facility. Below EPA is recommending an alternative approach to those suggested in HRWTF's proposal. EPA believes this alternative will achieve the same goal of more accurate reporting of toxic releases to the environment by the IUs, while still meeting the purposes of the TRI program.

Specific Concerns with Hopewell's Proposed Options:

Option One

- C Since the covered facility would include the HRWTF as well as the IUs, HRWTF would need to consider all of the toxic chemicals manufactured, processed or otherwise used at the POTW and at the individual facilities (*i.e.*, Allied Signal and Hercules) for threshold determinations and release and other waste management calculations. This could potentially be very burdensome for the HRWTF.

- Would the IUs report everything but the POTW transfers to the TRI database or would they not report anything for these toxic chemicals? Appendix B implies that the IUs would report all releases and other waste management except the transfers to the POTW on their forms, but elsewhere in the proposal this point is less clear.
- If the transfers to the POTW are not reported by the originating facility, information concerning the total production related waste and movement of the toxic chemicals within the waste management hierarchy at the covered facility would be lost. It would appear as if these IUs are performing source reduction activities when in fact, their waste management is simply being reported by the HRWTF. In addition, users of the data would not know where the toxic chemicals in waste originated.
- If the IUs would no longer report any information to TRI on these toxic chemicals, all of the information not associated with the transfers (*e.g.*, maximum amount on-site, use information, other releases and waste management) would be also completely lost from the database.

Option 2

- Each IU would have to include all of the waste treatment activities occurring at the HRWTF in section 7A on the IU's form. This could potentially be very time consuming.
- If the HRWTF is considered onsite for the IUs, these IUs would need to consider all of the toxic chemicals manufactured, processed or otherwise used at the POTW for threshold determinations and release and other waste management calculations. How would this information be considered at each IU? This, too, could potentially be very burdensome. It may also result in multiple IUs reporting the same releases.
- How would releases of the toxic chemical that occur at the HRWTF be considered in section 5 (on-site releases) for the IU? Users of the data would be misled to believe that there are emissions and other sorts of on-site releases occurring at the IU instead of at the POTW.

EPA's Proposed Option

Under EPA's proposed option, the EPCRA section 313 covered facilities (*i.e.*, the industrial users) would continue to report all transfers to the HRWTF on their respective Form Rs. However, based on the treatment efficiencies and release information provided by HRWTF, the information reported as transferred off-site in section 6.1 (transfers to POTWs) would contain separate entries for quantities of the toxic chemical actually destroyed and quantities that are ultimately released from the POTW. In addition, these quantities would be reported separately in sections 8.1 (quantities released) and 8.7

(quantities treated off-site). The HRWTF would provide information on specific releases (including air releases, deposition in sludge and quantities that pass through the POTW without being treated) and treatment (i.e., destruction) activities performed on the toxic chemical. In the TRI database, EPA would include the ultimate disposition of the toxic chemical transferred to the HRWTF. Under this option, the EPCRA section 313 covered facilities would have to agree to this reporting format.

- The 1998-1999 NACEPT committee expressed support for reporting in this manner.
- Reporting this way would meet the Hopewell proposal statement that there will be “more accurate reporting of releases to the environment by the TRI reporter when HRWTF treats/destroys” the toxic chemical (pg. 15 of the proposal).
- This option is partially addressed in the legal opinion (Appendix B) and, per the Hopewell legal team, seems to have no legal obstacles.
- Because these toxic chemicals are being transferred from the originating facility to the HRWTF, it would be misleading to the public to report the POTW efficiencies as on-site treatment at the originating facility.

(Attachment 3)
HRWTF Project XL Proposal

**Comments from the Virginia Department of Environmental Quality
on the Pretreatment Portion of the Project Proposal**

1. Hopewell currently permits 5 categorical industrial users (CIUs) in its pretreatment program. The proposal indicates that these would be covered under the Project XL "bubble" and would no longer be CIUs. End-of-pipe would move from the facilities e-o-p to Hopewell's e-o-p. Will the "bubble" facilities be eliminated as SIUs in HRWTF's pretreatment program? Page 28 of the proposal states that requirements for SIU permits would be eliminated. With the State continuing as the pretreatment control authority, VADEQ feels that the "bubble" facilities still need to be permitted by HRWTF even if no limits are imposed. This would facilitate the continuation of general prohibitions on interference and pass through and allow enforcement activity if required.
2. Monitoring should still be included in the IU "bubble" permits, even if HRWTF agrees to conduct it.
3. Those facilities outside the "bubble" should continue in HRWTF's pretreatment program as it is currently set up.
4. DEQ should inspect all IUs as it is currently doing and all "bubble" facilities should be inspected by DEQ as necessary or perhaps at a reduced frequency (i.e., once during the permit cycle). However, this would necessitate changes in current State regulations that require the inspection of all categorical IUs at least once every two years.
5. While it may be more efficient to treat the wastewater discharge from Smurfit-Stone Container at HRWTF, this doesn't appear to eliminate the need for a covered collection system to meet future air requirements.
6. The proposed project will obviously necessitate some changes to HRWTF's current approved pretreatment program. If modifications should be incompatible with existing state statutes, laws and regulations, additional review by other departments at VADEQ, state advisory boards, or even the VA General Assembly could be necessary.

From a pretreatment standpoint, it doesn't appear that the Project XL proposal greatly enhances the current program. The benefits would be to improve the treatability of the HRWTF system (by allowing the "bubble" IUs to discharge at higher concentrations, which HRWTF was designed to treat in the first

place). DEQ generally agrees with this approach. Additionally, the proposal should consider promoting multimedia pollution prevention at the "bubble" industries.

Pros: lower costs for selected industries and improved performance at the HRWTF.

Cons: increased risk of interference or pass through since the IUs would not be pretreating their wastes (or doing so at a much reduced level) and accidental releases from IUs may not be detected until they have entered the HRWTF.