

Quinn-Perkins Sand & Gravel Response to Comments on Draft National Pollutant Discharge Elimination System (NPDES) Permit No. MA0004081

Introduction:

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's responses to comments received on the Draft NPDES Permit (MA0004081). The responses to comments explain and support the EPA determinations that form the basis of the Final Permit. The Quinn-Perkins Sand & Gravel draft permit public comment period began December 1, 2004 and ended on December 31, 2004. Comments and a request for public hearing were received from Merrimack River Watershed Council, Inc. in a December 30, 2004 letter. EPA determined that a public hearing was not warranted and that the comments could be adequately addressed in this response to comments. The comments requested clarifications and further explanations of information in the fact sheet. Since the fact sheet is a final document, no changes were made. Instead, the comments were noted and a response to them is included in this document.

The Final Permit is substantially identical to the Draft Permit that was available for public comment. Although EPA's decision-making process has benefitted from the various comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the permit. EPA did, however, improve certain analyses and make certain clarifications in response to comments. These improvements and changes are detailed in this document and reflected in the Final Permit. A summary of the changes made in the Final Permit are listed below. The analyses underlying these changes are explained in the responses to individual comments that follow.

1. The following statement will be added to the final permit: "To ensure that unknown contaminants do not enter the waste water system at the site, the permittee shall only wash clean rock, stone or gravel in its crushing/washing/sorting operation."
2. The following statement will be added to the final permit: "No material classified as Asphalt-Brick-Concrete (ABC) rubble may be washed as part of the crushing and washing operation."
3. The following statement will be added to the final permit: "The permittee shall notify the regulatory agency in writing of any changes in the operations at the facility that may have an effect on the permitted discharge of wastewater from the facility."
4. The correct MA DEP Regional Office address for this facility is: MA DEP, Northeast Regional Office, Bureau of Waste Prevention, 1 Winter Street, Boston, MA 02108.

Merrimack River Watershed Council, Inc.'s Comments on Draft NPDES Permit

Comment 1: The Quinn-Perkins Sand & Gravel Processing facility has been operating without a permit for eighteen (18) years. A time period of twenty-three (23) years has passed since a 1981 renewal of the 1974 permit. This fact alone would certainly require a full up-to-date investigation and assessment of both the operational and impacted areas of this sand and gravel processing location.

Response to Comment 1: The current permit was issued June 24th, 1974 and expired 5 years later. However, under 40 CFR §122.6 **Continuation of expiring permits.**, (a) *EPA permits.*

“When EPA is the permit-issuing authority, the conditions of an expired permit continue in force under 5 U.S.C. 558(c) until the effective date of the new permit....” This means that the permittee operated under the expired permit, the conditions of which remain in force until the issuance of a new permit.

Due to the age of the information in the file, EPA requested a new application with an updated pollutant scan. The permittee submitted the requested application with updated information. EPA performed a site visit as well to ensure a more thorough understanding of the process. The draft permit and fact sheet were developed based on this updated information.

Comment 2: Although we have requested additional documentation and appendices, and not yet received this documentation, we have serious concerns regarding the design characteristics of the settling ponds, possible unidentified treatment additives and unidentified collection sources to these ponds.

Response to Comment 2: EPA has sent the requested documentation to your office. During our site visit we verified the layout and operations on the site. The permittee has not indicated, nor did we notice, the use of any treatment additives in its process. The permittee is required to properly design and maintain its on-site treatment system (settling ponds) to ensure that they are able to meet the effluent limits contained in their discharge permit. During EPA’s site visit, no unidentified collection sources were found. The permittee stated that only wastewater from the washing operation enters the settling ponds.

Comment 3: Clearly there has been a change in Quinn-Perkins Sand & Gravel operations. The original 1974 permit was issued for processing of on-site excavated native materials. This permit is for processing of foreign material from multiple off-site unknown varying sources.

This needs to be addressed with full chain of custody manifest documentation and disclosure of materials for processing, as well as a determination of possible contaminants and pathogens which could be potentially concentrated and discharged to Vine Brook, Butterfield Pond and the Shawsheen River Watershed.

Although we realize the boilerplate sand and gravel parameters which are contained in the draft permit are reasonable for well known and well understood sand and gravel operation-this is not the case here. There are more unknowns than knowns in this particular case.

Response to Comment 3: The permittee has stated that the rock and stone (raw material), that is brought to the site and crushed, washed and sorted, is clean raw material from a gravel pit in Townsend, Massachusetts. The material is uncontaminated, virgin material.

Another part of the operation involves the trucking in of asphalt, brick and concrete (ABC) rubble from road improvement projects. EPA contacted Mr. Paul Emont of the MA DEP and we discussed the State of Massachusetts regulations and guidance concerning the proper use, storage and classification of ABC rubble used for roadway construction. The regulations preclude the use of contaminated material and limit the storage time for the crushed material. The permittee has stated that the ABC material is crushed and not washed.

EPA has decided to add language to the final permit to require that only clean raw material (rock, stones and gravel) is used in the crushing and washing operation. In addition that ABC

material is excluded from washing and its related discharge.

Additional sampling by the permittee indicate a TSS level of 12.0 mg/l at the outfall, Non-detect in Butterfield Pond and 22 mg/l in Vine Brook. EPA believes the activities occurring on site do not have a reasonable potential to affect the impairment related to pathogens as explained further in Response to Comment 4 below.

Comment 4: The Merrimack River Watershed Council, Inc. has performed numerous technical studies of the Shawsheen River Watershed including the ***Bacteria TMDL for the Shawsheen River Basin MA83-01-2002-24***. Merrimack River Watershed Council *Vine Brook Comprehensive Bacteria Study MADEP Project #2002-13/MWI Jan 2002-June 2003* shows unexplained variations in bacteria levels in Vine Brook in the vicinity of Quinn-Perkins Sand & Gravel location.

This unexplained variation in pathogen levels combined with unknown sources of materials transported to the Quinn-Perkins location are serious cause of concern.

The Merrimack River Watershed Council, Inc. is alarmed at the potential of a permit renewal without full investigation of the gravel processing operation which primarily involves washing and discharge of unknown and potentially contaminated source material.

Response to Comment 4: The *Shawsheen River Watershed, 2000 Water Quality Assessment Report*, Report Number 83-AC-2 listed continuous source categories which included point sources, broken sewer lines, illicit disposal to storm drains, poorly performing septic systems and direct wildlife. The report cited illicit connections and sewer breaks as the most important sources during dry weather. The report concluded that Municipal Separate Storm sewer systems and sanitary sewer overflows were suspected sources.

EPA reviewed the data collected by the Merrimack River Watershed Council in the Bacteria TMDL for the Shawsheen River Basin MA83-01-2002-24. The TMDL study listed Vine Brook as impaired for pathogens. The facility operated during the months that data was collected for this report.

If the facility is a contributor to the impairment, then the data point taken at the outflow of Butterfield Pond should show a corresponding rise or maintenance of the upstream fecal coliform levels. In fact, the opposite occurred. The data collected at that point just downstream from the facilities discharge showed a significant drop in the level of fecal coliform bacteria below the water quality standard of <200 cfu/100 mls. The fecal coliform data taken just below the discharge was one of the lowest recorded levels of fecal coliform on the entire stretch of Vine Brook. The report mentioned several probable sources of contamination, not listing this facility as one of them.

Based on a further review of the data and an understanding of the operations at the site, EPA concludes that the facility has no reasonable potential to contribute to the impairment related to pathogens in Vine Brook.

