

Concord NPDES Permit - Response to Comments

On May 5, 2005, the United States Environmental Protection Agency (“EPA”) and the Massachusetts Department of Environmental Protection (“DEP”) (together, the “Agencies”) released for public comment a draft permit for the Concord Wastewater Treatment Facility. The draft permit was subject to a public comment period from May 5, 2005 to June 3, 2005. The Response to Comments below includes written comments submitted to EPA and DEP during the public comment period.

Comments were submitted by the Town of Concord in a letter dated June 3, 2005.

Comment #1: Phosphorus Compliance Schedule: The compliance schedule (Section E, 1-4) in the Draft Permit requires the Town to achieve the 0.2 mg/L seasonal permit limit within 36 months. Requiring the Town to meet this low P limit while the upstream communities including MCI Concord are still discharging 0.75 mg/L of P is neither logical nor equitable. We request that the Town’s compliance schedule be adjusted.¹

Response #1: Regulations found at 40 CFR § 122.47(a)(1) state that EPA “may, where appropriate, specify a schedule of compliance leading to compliance with the Clean Water Act and regulations.” The regulation also provides that any such compliance schedule shall require compliance “as soon as possible.” The phosphorus effluent limit of 0.2 mg/l was imposed to ensure compliance with Massachusetts Water Quality Standards (“MAWQS”) (see e.g. 40 CFR § 122.4(d) and 314 CMR § 4.04(5) (“Control of Eutrophication”), requiring that any existing point source discharge that encourages eutrophication be provided with the Highest and Best Practical Treatment to remove nutrients. Because achievement of the new phosphorus limit will require a construction upgrade of the facility, EPA imposed a 36 month schedule of compliance. EPA concluded that the compliance schedule would be reasonable and appropriate in this case because of the significant amount of planning and design work that has already been completed. The schedule allows a full year to finalize any necessary design work and initiate construction and then two full years to complete construction. Water quality benefits in the eutrophic Concord River will be realized by a reduction in the phosphorus loading from the Concord Wastewater Treatment Facility independent of reductions in other sources. Further delaying compliance with the final phosphorus limit until upstream dischargers achieve lower phosphorus limits is not a persuasive justification under 40 CFR § 122.47(a)(1). Neither the “equitable” argument that certain upstream dischargers received longer compliance schedules nor the “logical” implication that compliance will be easier once reductions in upstream phosphorus loading occur are relevant considerations under the “as soon as possible” standard that EPA is obligated to apply. In light of EPA’s rationale for the 36 month compliance schedule, and since the Town has not articulated any reasons why it cannot comply with the phosphorus limit within such time, the compliance schedule has not been adjusted.

Comment #2: Phosphorus Limit of 0.2 mg/L: The limit of 0.2 mg/L (Footnote 8) included in the Draft Permit appears to be arbitrary and does not come from either a

¹ We understand new upstream total phosphorus limits will not be implemented earlier than April 1, 2009.

TMDL for the Concord River or a cost-benefit analysis of low P discharge levels into the Concord River. It appears from the Fact Sheet that much of the data available was collected from the Assabet River and is being extrapolated to apply to the Concord River. The Concord River does not face the same level (or source) of stresses as the Assabet River, due to the additional flow contribution from the Sudbury River. The specific 0.2 mg/L limit should be justified with water quality data from the Concord River and an analysis showing the estimated improvement over existing conditions once a 0.2 mg/L discharge limit is achieved. This analysis should include applicable dilution factors based on Concord River flows, taking into account the contribution from both the Assabet and Sudbury Rivers.²

Response #2: Under the CWA, effluent limitations must be sufficiently stringent to ensure compliance with MAWQS. Consideration of cost is not a permissible factor in setting water quality based effluent limits. United States Steel Corp. v. Train, 556 F.2d 822, 838 (7th Cir. 1977); see also, In re City of Moscow, 10 EAD 135, 168 (EAB 2001).

EPA is required to use the best available information to establish limits in permits to achieve the designated uses required by applicable water quality standards. All of the data cited in the fact sheet is from the Concord River and not the Assabet River. Neither the Sudbury River nor the Assabet River can be considered as unimpaired dilution for the Concord discharge. Phosphorus levels in the Sudbury River are at or above recommended criteria levels (see SuAsCo Watershed – 2001 Water Quality Assessment Report data for Sudbury River segment MA82A-04). Projected phosphorus levels in the Assabet River will approximate recommended criteria levels if all TMDL requirements are successfully implemented, but are currently much higher than recommended criteria. The permit limit is also consistent with the Highest and Best Practical Treatment requirement of the MAWQS.

Comment #3: Permit Term and EPA’s Right to Revise Limits: The term of the new NPDES permit is 5 years. The identification of limits for a period of the next 5 years allows the Town to plan both logistically and financially for the future operation of the Wastewater Treatment Plant. The Town is preparing to embark on a significant plant upgrade project intended to carry the system through the next 20 years. Sewer rates have been adjusted and forecasted to account for the capital and operational changes that have been anticipated. The potential that EPA can change permit limits within the 5-year permit term constitutes an unacceptable risk and is contrary to sound planning principles. We request this language be clarified in Footnote #8 and changed in the Fact Sheet (page 5, fourth paragraph) striking the wording “Therefore, this permit may be re-opened and modified prior to the expiration date.”

Response #3: It is EPA’s obligation to issue permit limits that are sufficient to ensure MAWQS are met. Any new information suggesting that the permit limits are not sufficient to ensure that water quality standards are met could result in a modification of the permit. All permits contain a standard re-opener clause should it become necessary to re-open and modify a permit for cause. If sufficient cause under the applicable

² The dilution of the Town’s effluent, even during low flow periods, is enormous—approximately 19 times.

regulations does not exist for re-opening the permit, changes to the permit limit would have to be made at the time of re-issuance. Footnote #8 uses the term “future permit actions” to refer to either a modification or a re-issuance. The Fact Sheet incorrectly refers only to a modification.

While fact sheet language is fixed at the time of public notice of the draft permit and cannot be changed, the Response to Comments serves to supplement the administrative record.

Comment #4: Extended P Removal Season: The Draft Permit extends the P reduction season an additional 60-days from the current May 1 through September 30 timeframe to April 1 through October 30 (Fact Sheet, page 5). Little justification has been presented for this two-month extension which will result in a 40% increase in phosphorus-reduction costs. The P season should remain unchanged with any extension allowed only if based on compelling Concord River-based conditions and evidence that the extension of the season for the Concord Wastewater Treatment Plant will make a measurable difference. At a minimum, no extension should be required earlier than the effective date of a new total phosphorus limit.

Response #4: The months in which the 0.2 mg/l phosphorus limit applies are based on the growing season for aquatic plants in the Concord River and is consistent with the TMDL recommendations and draft permits for the Assabet River discharges. During the growing season, aquatic plant growth will take up the instream phosphorus and can accumulate the phosphorus in the sediment biomass. The Concord River sediments are organically rich sediments with the potential to recycle significant amounts of sediment phosphorus back into the water column. In order to minimize this continuing source of phosphorus, more stringent limits are necessary throughout the growing season. Since the Town has not articulated any reasons why the interim limit cannot be met during the entire growing season, earlier than the effective date of the new total phosphorus limit, the permit condition has not been changed.

Comment #5: Monthly Average Limits: The present permit allows for the P limit to be calculated as a seasonal average. Given the sensitivity to spring and fall algae blooms, a change in the seasonal average is understandable. However, the Town does not see justification for calculating the average monthly (Fact Sheet, page 5), as opposed to using a 60-day rolling average as allowed in the NPDES permits for the upstream Assabet River communities. The Town requests that the draft limit be changed from monthly to either a seasonal limit as in our present permit, reflecting a total seasonal loading to the river, or a 60-day rolling average.

Response #5: The previous permit did not define a numeric final phosphorus limit; the numeric interim limit was defined as a monthly average limit. The Massachusetts Department of Environmental Protection (MADEP) has defined the 0.2 mg/l Highest and Best Practical Treatment limit as a monthly average limit. For more stringent limits, such as the 0.1 mg/l limits included in the draft Assabet River permits, EPA and MADEP have determined that some limited flexibility on the averaging period is appropriate.

Comment #6: CoMag System Implementation and Nutrient Trading: The Town is currently planning to install at considerable expense a full-scale CoMag system to provide additional P removal capability not built into the 1980s plant design. By installing this state-of-the-art system, the Concord WWTP will have the ability to achieve lower effluent P levels that could be used to enhance water quality by allowing nutrient trading with another community that may not be able to cost-effectively meet low P limits. The Town encourages the EPA to establish an administrative mechanism to facilitate this environmentally and fiscally responsible approach to achieving lower total P loads.

Response #6: If a future water quality analysis or a TMDL suggest that phosphorus trading is feasible and will ensure attainment of water quality standards, the Agencies will support such a program and will work with all interested participants to design it and incorporate appropriate conditions in permits. However, the very low instream criteria values and the near field impacts that are often associated with phosphorus discharges combine to limit the potential for successful phosphorus trading programs.

Comment #7: Changes in Monitoring Requirements: Several of the increased monitoring requirements in the Draft Permit have cost and logistical implications that are not cost-justified:

- a. *Fecal Coliform Monitoring:* The increase in fecal coliform monitoring from twice per week to daily is questioned for the following reasons:
 - 1) The Town's disinfection system feed and controls have been substantially upgraded at a considerable cost over the term of the last NPDES permit resulting in a significant increase in reliability and permit compliance.
 - 2) With continuous residual chlorine monitoring (presently, for process control, and in the future for final effluent monitoring), EPA can be assured that there is consistent disinfection within the appropriate range of chlorine levels to achieve the necessary pathogen kill.
 - 3) The proposed increase in fecal coliform monitoring does not provide any increase in system reliability or control, given the duration required before test results are known.
 - 4) Daily sampling opens the Town up to an increased possibility of non-compliance related to sample collection and analysis problems.³
 - 5) There is no evidence that the Concord WWTP has had adverse effects on the quality of Billerica's drinking water supply in the past.

Based on all of these factors, the Town believes that the frequency of fecal coliform monitoring in the present permit is appropriate and any increase is not justified.

- b. *pH Monitoring:* The increase in pH reporting from once to three times per day is questioned for the following reasons:

³ Presently if there is a problem with sample processing (e.g., equipment malfunction), the Town can declare a sample void, note the problem on the DMR, and take a subsequent sample the following day. Given the required sample analysis duration, a second sample would not be able to be taken with a daily sampling frequency, and the voided sample may result in an exceedance.

- 1) With continuous pH monitoring both within the present secondary treatment system and in the future at the effluent end of the CoMag system, and with the upgraded SCADA system to be installed as part of the facility upgrade, pH is very closely monitored and controlled.
- 2) With this heightened level of continuous pH monitoring, an increase in pH grab samples will not impact system control or reliability.
- 3) On weekends, the WWTP only has part-time staffing. Therefore sampling at the same times each day as on the weekdays may not be feasible.

Based on these factors and the lack of an obvious benefit to this increased reporting, the Town believes that pH grab samples should remain at one per day.

c. Aluminum Monitoring: The Draft Permit suggests weekly monitoring of aluminum in the future. Currently, aluminum results are reported quarterly through the WET test reports. Based on an analysis of these results, it appears that some level of aluminum carry-over into the treatment plant effluent does occur when alum is being used as a coagulant within the existing treatment system. However, this carry-over is not to the extent that it presents concerns over exceeding water quality standards for the Concord River. Testing performed on the CoMag system has revealed that aluminum levels, even with high doses of alum, are significantly reduced through the CoMag process. Therefore, in the future, effluent aluminum levels are anticipated to be substantially lower than they are now. Given that present effluent aluminum levels are not problematic, based on the WET test results, and that alum dose changes on a seasonal basis, rather than weekly or monthly, the Town believes that the present quarterly sampling is appropriate. Furthermore, once the full-scale CoMag system is operational, effluent aluminum levels will go down, and increased sampling will be unnecessary. If increased aluminum monitoring is required in the short-term, these requirements should be scaled back once the CoMag system goes online and should be removed if a coagulant is used in the future that does not contain aluminum.

d. Sampling Times and Locations: A note in Part I states that:

“a routine sampling program shall be developed in which samples are taken at the same location, same time, and same days of every month. Any deviation from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA.”

This statement is contrary to the EPA guidance that sampling be “random and representative.” Furthermore, sampling on the same days each month is not always practical due to non-routine operational constraints, weekends, holidays, etc. The Town understands and agrees with comments pertaining specifically to fecal coliform and chlorine residual monitoring that increases in sampling frequency or changes to the routine sampling program (e.g., due to equipment failure, process control needs, etc.) should be noted and explained in the monthly DMR submittal. However, the

further extension of this concept to stipulate that sampling be at the same times on the same days of each month is both operationally infeasible and, as stated above, contrary to other guidance from EPA.

Response #7: Fecal Coliform Monitoring: Due to the proximity of this discharge to the City of Billerica's water supply intake, it is important to closely monitor the disinfection process. Improving system reliability and control, while important, is not the primary focus of monitoring requirements. The primary focus of monitoring requirements is to ensure that the system is capable of maintaining compliance with permit limits at all times. To this end, increased monitoring frequency can be very useful.

While we acknowledge that the system has been upgraded, regular data is still necessary to ensure that the system is maintaining compliance with permit limits. While continuous chlorine monitoring of the final effluent will be in place 36 months from the effective date of the permit, and will provide a continuous indication as to whether chlorine levels are sufficient to achieve the required bacteria kill, we need to ensure compliance with the fecal coliform limit in the interim. Since the continuous chlorine monitoring currently utilized for process control will indicate all times that chlorine levels are outside the appropriate range necessary to achieve the pathogen kill, we have added a chlorine reporting requirement in lieu of the increased frequency of fecal coliform monitoring. The requirement is to report, with the DMRs, all periods in which chlorine levels were less than 0.15 mg/l in the chlorine contact tank, including the date, time, and duration that chlorine levels were less than 0.15 mg/l. This has been identified by the permittee as the minimum level of chlorine in the contact tank that is necessary to achieve adequate disinfection. In addition, we have clarified when additional fecal coliform monitoring is required.

Legitimate sample processing problems that result in invalid tests and are documented in the DMRs would not be considered as non-compliance.

pH Monitoring: While system reliability and control are important, the primary focus of monitoring is to ensure that the system is capable of maintaining compliance with permit limits at all times. Since continuous monitoring is superior to grab sampling for ensuring that permit limits are met at all times, the final permit requires that pH compliance be reported using the continuous pH monitor of the final effluent beginning 36 months from the effective date of the permit. In the interim, the requirement for three times per day grab sampling remains in the permit for Monday through Friday and the requirement for grab sampling on Saturday and Sunday has been reduced to once per day.

Sampling at a consistent time on the weekends that is different than the sampling time on weekdays would be consistent with the requirement for establishing a consistent sampling program relative to day and time.

Aluminum Monitoring: Aluminum levels in the effluent are currently high enough to be of concern and warrant an increase in the monitoring frequency. Summer period aluminum levels in 2003 and 2004 ranged from 1.05 mg/l – 2.39 mg/l. A once per month monitoring frequency should be sufficient to characterize aluminum levels in the effluent.

The final permit reflects a once per month monitoring requirement. If upon implementation of the CoMag treatment facility the effluent data indicates consistently low aluminum values, the Town can petition EPA for a further reduction in the monitoring frequency.

Sampling Times and Locations: The primary requirement relative to effluent sampling is that the sampling must be representative of the effluent. In order to prevent selective sampling it is important to specify consistency in the timing of the sampling. The requirement anticipates that there will be occasions that sampling on the same day and/or time is not feasible and simply requires that the DMR document the change and the reason for the change.

Comment #8: With the January effective date of the present permit, the annual I/I report was due in January each year. Although the frequency of reports is the same in the Draft Permit, the annual submittal will change based on the new permit effective date. Logistically, the town prefers to submit the annual report in January, as our flow monitoring program spans from spring to fall each year, allowing adequate time for data analysis and report preparation. The Town requests that the January submittal date remain unchanged, despite the new effective date of the permit.

Response #8: The final permit reflects a submittal date of January 31st each year.

Comment #9: The Town accepts changes such as the conversion to “flow-based” composite sampling, the increase in residual chlorine monitoring and reporting if chlorine is used in the long-term, and the need to provide financial information in the I/I reports. Also, the Town is pleased with the streamlining that has occurred in the process for the use of lab water in toxicity test dilutions.

Response #9: No response necessary.

Comments were submitted by the National Park Service in a letter dated June 2, 2005.

The National Park Service is especially interested in this draft permit because it discharges directly into that part of the Concord River that has been designated as Wild and Scenic. As you know, 29 miles of the Sudbury Assabet and Concord Rivers have been nationally designated as part of the Wild and Scenic River System. The National Park Service as the administering agency is responsible for long term protection and stewardship of the rivers’ ‘outstandingly remarkable resources’ including scenic, historic, cultural, recreational and ecological values. One of the greatest threats to these resources is impaired water quality, especially due to high nutrient loads. Section 7 of the Wild and Scenic Rivers Act gives the National Park Service the responsibility to evaluate this permit to ensure the proposed discharge will not adversely affect the resource values for which the river was designated.

Comment #1: The Concord River is listed on the 303(d) list due to impairments from excess nutrients, metals and pathogens. Any phosphorus limits imposed in this permit

should be water quality based and set at a level intended to bring the river into compliance with water quality standards. All guidance documents produced by EPA and discussed in the fact sheet suggest a numeric phosphorus criteria for this ecoregion and this type of slow moving river system, ranging from 0.1 mg/l to 0.02 mg/l. EPA and DEP have required phosphorus removal to 0.1mg/l in the Marlborough Easterly WWTP permit. However, the most recent analysis, done by Mitchell, Liebman, Ramseyer and Clark (2004) utilizing the most current data and having been subjected to quality assurance measures suggests the need for the more conservative concentrations (0.020 - 0.022 mg/l). In light of this growing body of information, a proposed 0.2mg/l phosphorus limit appears totally inadequate to protect and restore water quality. A limit of 0.1mg/l should be required until numeric criteria are adopted.

Response #1: While the Sudbury River provides no effective dilution of the Concord discharge relative to phosphorus, implementation of significant phosphorus reductions on the Assabet River are designed to achieve low levels of ambient phosphorus in the Assabet River. Depending on the success of the Assabet River phosphorus reductions and the development of numeric phosphorus criteria by MADEP, a lower phosphorus limit may be necessary in the future. At this time, application of the water quality standards provision requiring the Highest and Best Practical Treatment is a reasonable measure for ensuring that water quality standards will be met. At a discharge of 0.2 mg/l, the Concord discharge has the potential to raise instream concentrations approximately 0.01 mg/l under 7Q10 flow conditions. Whether this increase will cause or contribute to water quality excursions depends significantly on how much upstream concentrations are reduced and what MADEP adopts for a numeric phosphorus criteria.

Comment #2: Excessive nutrient enrichment poses a serious water quality threat to many of the rivers in this watershed and throughout the State. For this reason the State should expedite the development of numeric phosphorus criteria that will better protect water quality. It would be very helpful if DEP presented a timeframe within which these criteria would be adopted. If the timeline for adoption of numeric criteria exceeds the five year span of this permit, then gathering of additional water quality data and development of a TMDL should begin on the Concord River.

Response #2: The current schedule for development of phosphorus criteria is for completion of proposed criteria by early 2007. While it may take some additional time to formally adopt the numeric criteria, we will have a good indication of what the criteria are likely to be well before the expiration date of this permit. A TMDL has been initiated for the Concord River, including much of the data collection, but resource limitations at the state level have delayed completion of the TMDL.

Comment #3: The Town of Concord should be congratulated for helping to demonstrate the successful use of CoMag technology to treat wastewater. According to results of demonstration tests at Concord WWTP, the CoMag technology is capable of reaching phosphorus levels of at least 0.05 mg/l, far lower levels of phosphorus than required in this permit. This state of the art technology when brought up to full scale operation will enable towns like Concord to move closer to meeting numeric phosphorus criteria that protect water quality.

Response #3: We agree. The Town of Concord should be well positioned to cost effectively respond to lower phosphorus limits should future water quality data and/or a TMDL indicate the need for such lower limits.

Comment #4: Relaxation of the phosphorus limit in the winter months needs to be more closely evaluated. Although there is less plant growth that accumulates dissolved phosphorus in the winter, there is still a concern that particulate phosphorus could settle and accumulate in the sediment. There should be no more particulate phosphorus discharged in the winter months than in the summer. A limit should be required year round, or monitoring must show that at least 90% of the phosphorus is dissolved during the winter.

Response #4: The goal of the winter period phosphorus requirements is to ensure that the discharge of particulate phosphorus levels is minimal. If the data indicate that particulate phosphorus is not minimal, or if ambient data indicates that dissolved phosphorus is being retained in the river system, more stringent winter period requirements will be incorporated into a modified or reissued permit.

Comment #5: Downstream of the discharge point, the Concord River flows through the U.S. Fish and Wildlife Service's Great Meadows National Wildlife Refuge. Maintaining the highest possible level of water quality in the River is necessary in order to achieve the goals of the national wildlife refuge system. These include conserving, managing and restoring wildlife, fish and plant resources and their habitats and ensuring that unique values of wilderness are protected.

Response #5: Achieving the permit limits will require a significant improvement in treatment efficiency with corresponding water quality benefits relative to multiple pollutants.

Comment #6: Not only is the Concord River a national Wild and Scenic River, it also supplies the drinking water to the Town of Billerica. Human health as well as ecological health should be considered when setting these permit limits.

Response #6: Human health has been considered in developing this permit and, where necessary to meet applicable human health criteria, limits have been included.

Comments were submitted by the Riverways Program in a letter dated May 31, 2005.

Comment 1: The draft permit maintains the existing pH range limitation of 6.0 to 8.3 s.u. The lower pH limit is significantly below the Massachusetts water quality standard for Class B waters of 6.5 s.u. The Concord River affords a dilution of only 19 for this discharge. The receiving water also has treated wastewater as a significant percentage of its flow because of many upstream municipal discharges which is a consideration when introducing additional treated wastewater. It is also pertinent to note the other point discharges into the Concord and Assabet Rivers have a pH limit of 6.5 s.u. including the

smaller MCI Concord facility just upstream of this municipal discharge. Has there been in situ monitoring over a range of conditions to determine if the Concord River is able to assimilate the flows from the treatment plant when it is discharging effluent with a pH lower than 6.5 s.u. and still achieve Class B water quality standards? This is particularly important given the on-going efforts to restore a viable herring fishery to the river. Efforts to reintroduce herring have included several years of stocking, some limited tagging efforts in the Merrimack River and volunteer-based fish counting in the Concord River. Inhospitable conditions have the potential to impact eggs and small fry and this initiative.

Response #1: Low flow ambient data collected by MADEP in the summer of 2001 and by ENSR International in the summer of 2002 indicate that pH levels at the mouth of the Sudbury are 7.0 or higher. Low flow data collected by ENSR International in the summer of 2001 indicate that pH levels in the Concord River above the Concord discharge are 7.0 or higher. With upstream pH concentrations above 7.0 and a dilution factor of 19, an effluent pH of 6.0 does not represent a reasonable potential to exceed ambient pH criteria.

Comment #2: The Fact Sheet noted the Concord treatment facility averaged a discharge of 0.94 MGD and the design flow of the plant is 1.2 MGD. This means the current average flow is about 78% of the design flow. The community has recently completed a comprehensive plan and has begun additional sewerage projects based on the recommendations from the plan which will result in increased influent volume. Many municipal NPDES permits include a requirement for the permittee to submit to the permitting agencies a, "projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans" invoked when the effluent volume reached a level where it was greater than 80% of the design flow for 90 consecutive days. This draft permit does not contain this provision though given the current effluent flows in relation to the design capacity of the facility and the planned increase in sewerage neighborhoods, this common NPDES permit provision would be a beneficial addition and allow the permittee to work with agencies and plan for future needs.

Response #2: The referenced requirement is not necessary to ensure compliance with permit limits. It is the responsibility of the permittee to ensure that the facility stays within the design flow limit and is capable of handling the design flow while maintaining compliance with permit limits. This community is upgrading the treatment facility to ensure compliance with limits at the design flow and is working with the regulatory agencies relative to planning for future sewerage.

Comment #3: The draft permit establishes phosphorus standards for this facility and a timeline for meeting the seasonal limit of 0.2 mg/l. As noted in the Fact Sheet accompanying the draft permit, this reach of the Concord River is listed as an impaired waterway on the MA Integrated List of Waters. Controlling the nutrient loads from the point sources discharging to the watershed is a necessary and critical measure to help restore the river to 'fishable and swimmable' status. The summer phosphorus limit of 0.2 mg/l is twice the concentration being allowed for the municipal dischargers to the

Assabet River. It would be preferable to have a consistent and more stringent concentration limit of 0.1 mg/l throughout the watershed given the significantly degraded status of the Concord River, the river is a Federally designated Wild and Scenic River, the Concord River supports a healthy recreation and visitor population and is known to have eutrophication problems. However, it is understood that without a completed TMDL and assigned load allocations or numeric water quality criteria to inform the permit, a concrete basis for more stringent phosphorus limits is difficult to justify. Footnote 8 recognizes both the current limitations in the assigned nutrient concentrations and loads in this permit and the likelihood of more stringent limitations in the future when either a TMDL is completed or nutrient criteria are adopted by the Commonwealth. Given the circumstances, the draft permit is a reasonable compromise. We support the monitoring schedule and reporting requirements in the permit. The information gathered by more frequent summer monitoring will provide useful data to the TMDL development process and the straightforward monthly average is more appropriate for a situation in which the waterways is already degraded and experiencing visible eutrophication. The required winter total phosphorus and SRP monitoring to determine the particulate fraction will also add valuable data to the TMDL process and in the discussion about seasonal limits.

Response #3: We agree and note that the proposed treatment facility upgrade is consistent with treatment technologies that may be necessary to achieve lower limits.