BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

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In the Matter of:)				
Town of Concord Department of Public Works)				
NPDES Permit No. MA0100668)	*	NPDES A	ppeal No. 1	3-08
)				

CERTIFIED INDEX TO THE ADMINISTRATIVE RECORD

As Ken Moraff, Director of the Office of Ecosystem Protection, United States Environmental Protection Agency, Region 1, I hereby certify that the attached index constitutes the Certified Index to the Administrative Record of NPDES Permit No. MA0100668, issued to the Town of Concord, Massachusetts.

October 31, 2013 Date

Ken Moraff

Director

Office of Ecosystem Protection

EPA, Region 1

ADMINISTRATIVE RECORD INDEX FOR THE TOWN OF CONCORD, MASSACHUSETTS NPDES PERMIT NO. MA0100668

A. PERMIT DOCUMENTS

- 1. Final NPDES Permit No. MA0100668 for the Town of Concord. August 2, 2013.
- 2. Letter. Ken Moraff, EPA to Christopher Whelan, Concord Town Manager, transmitting the final permit package. August 2, 2013.
- 3. Public Notice of Draft NPDES Permit and Fact Sheet. July 13, 2012.
- Letter. David M. Webster, EPA to Christopher Whelan, Concord Town Manager. RE: Public Notice, NPDES Reapplication No. MA0100668, Concord Wastewater Treatment Facility. September 30, 2011.
- 5. Letter. David M. Webster, EPA to David Ferris, MassDEP. RE: Request for 401 water quality certification for the Draft Permit. July 11, 2012.
- 6. Draft NPDES Permit No. MA0100668. July 2012.
- 7. Draft NPDES Permit No. MA0100668 Fact Sheet. July 2012.
- 8. Letter. Shelley Puleo, EPA to Alan Cathcart, Town of Concord. RE: NPDES Application No. MA0100668 Town of Concord (complete application letter). June 21, 2011.
- 9. Letter. Shelley Puleo, EPA to Alan Cathcart, Town of Concord. RE: NPDES Application No. MA0100668 Town of Concord (application deficiency letter). April 28, 2011.
- **10.** Town of Concord NPDES Permit Application Renewal. NPDES Permit No. MA0100668. September 2011.
- 11. Final NPDES Permit No. MA0100668. January 12, 2006.
- **12.** NPDES Permit No. MA0100668 Response to Comments. January 12, 2006.
- 13. Draft NPDES Permit No. MA0100668. May 2005.
- 14. Draft NPDES Permit No. MA0100668 Fact Sheet. May 2005.
- 15. Final NPDES Permit No. MA0100668. August 6, 2001.

- **16.** NPDES Permit No. MA0100668 Response to Comments. August 6, 2001.
- 17. Draft NPDES Permit No. MA0100668 Fact Sheet. June 30, 2000.

B. RESPONSE TO COMMENTS

 Response to Comments on Draft NPDES Permit No. MA0100668. Town of Concord Wastewater Treatment Plant. August 1, 2013.

C. PUBLIC COMMENTS

- Letter. Christopher Whelan, Concord Town Manager to Stephen Perkins, EPA. RE: NPDES Permit No. MA0100668, Comments on Draft Permit. Concord, Massachusetts. August 9, 2012.
- 2. Letter. Stephen Verrill, President of Concord Business Partnership to Brian Pitt, EPA. RE: Comments on Town of Concord, MA Draft NPDES Permit MA0100668. August 7, 2012.
- Letter. Alison Field-Juma, Executive Director of OARS to Stephen S. Perkins, EPA and David Ferris, MassDEP. RE: Comments on draft NPDES Permit No. MA0100668 issued to the Town of Concord, Massachusetts authorizing wastewater discharges into the Concord River. August 10, 2012.
- 4. Letter. Mary Antes, Secretary of the Sudbury, Assabet and Concord Wild and Scenic River Stewardship Council to Stephen S. Perkins, EPA and David Ferris, MassDEP. RE: Concord Wastewater Treatment Plant: Draft NPDES permit MA0100668. August 10, 2012.
- 5. Letter. Jamie Fosburgh, New England Team Leader of the NER Rivers Program (Department of the Interior). RE: Concord Wastewater Treatment Plant: Draft NPDES permit MA0100668. August 10, 2012.

D. WATER QUALITY CERTIFICATION

 Letter. David Ferris, MassDEP to David M. Webster, EPA. RE: Water Quality Certification NPDES Permit No. MA0100668 Concord Wastewater Treatment Plant. July 3, 2013.

E. CORRESPONDENCE

 Letter. John Felix, Deputy Regional Director, MassDEP to Ellen Roy Herzfelder, Secretary of the Executive Office of Environmental Affairs. RE: Concord Comprehensive Wastewater Management Plan EOEA #13088. September 3, 2004.

- 2. Phone Log. Call from Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: Source of phthalates in effluent.
- 3. E-mail. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: Minimum Detection Levels Table. May 5, 2011.
- 4. Email. Mike Thompson, Woodard & Curran to Robin Johnson, EPA. RE: NPDES Application MA0100668 Concord WWTF. May 9, 2011.
- 5. Email. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: NPDES Application MA0100668 Concord WWTF. May 10, 2011.
- 6. Phone Log. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: Need WWTF schematic and treatment description, and use of chlorine in treatment system. May 17, 2011.
- 7. Email. Mike Thompson, Woodard & Curran to Robin Johnson, EPA. RE: Concord Flow Diagram and Description. May 17, 2011.
- **8.** Phone Log. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: need for simplified treatment schematic. May 19, 2011.
- **9.** Email. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: NPDES Application MA0100668 Concord WWTF. May 19, 2011.
- **10.** Email. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: NPDES Application MA0100668 Concord WWTF. May 25, 2011.
- Email. Alan Cathcart, Town of Concord to Robin Johnson, EPA. RE: Concord MA NPDES Deficiency – Expanded Effluent Testing. June 17, 2011.
- **12.** Email. Kathleen Keohane, MassDEP to Robin Johnson, EPA. RE: Concord Tox Tests. June 20, 2011.
 - i. Attachment: Concord tox tests.pdf
- **13.** Email. Kathleen Keohane, MassDEP to Alan Cathcart, Town of Concord. RE: FY 2011 SuAsCo. June 22, 2011.
- 14. Email. Mike Thompson, Woodard & Curran to Kathleen Keohane, MassDEP. RE: Concord WWTP Process Diagram. June 23, 2011.
- **15.** Email. Richard McVoy, MassDEP to Robin Johnson, EPA. RE: Concord River Data Request. July 20, 2011.
- **16.** Email. Robin Johnson, EPA to Richard McVoy, MassDEP. RE: Concord River Data Request. July 25, 2011.

- 17. Email. Mary Garren, EPA to Robin Johnson, EPA. RE: Concord River TMDLs. August 18, 2011.
- **18.** Email. Robin Johnson, EPA to Mary Garren, EPA. RE: Concord River TMDLs. August 18, 2011.
- Email. Mary Garren, EPA to Robin Johnson, EPA. RE: Concord River TMDLs. August 18, 2011.
- **20.** Email. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: Concord MA NPDES MA0100668. August 22, 2011.
- **21.** Email. Mike Thompson, Woodard & Curran to Robin Johnson, EPA. RE: Concord MA NPDES MA0100668. August 23, 2011.
- **22.** Email. Mike Thompson, Woodard & Curran to Robin Johnson, EPA. RE: Concord MA NPDES MA0100668. September 6, 2011.
- **23.** Email. Robin Johnson, EPA to Mike Thompson, Woodard & Curran. RE: Concord MA NPDES MA0100668. September 6, 2011.
- **24.** Email. Mike Thompson, Woodard & Curran to Robin Johnson, EPA. RE: Concord MA NPDES MA0100668. September 6, 2011.
- 25. Email. Alison Field-Juma, OARS to Robin Johnson, EPA. RE: WQ Data for Concord River. September 7, 2011.
 - i. Attachment: OARS-ConcordRiver-DATA-2004-2010.xlsx
- **26.** Email. Richard McVoy, MassDEP to Robin Johnson, EPA. RE: Concord Water Quality Dat [sic]. September 8, 2011.
 - i. Attachment: EPA-Concord 9-11.xlsx
- **27.** Email. Richard McVoy, MassDEP to Robin Johnson, EPA. RE: Multiprobe Data for three stations in Concord. September 15, 2011.
 - i. Attachment: Concord-Attended.xlsx
- **28.** Email. Robin Johnson, EPA to Kathleen Keohane, MassDEP. RE: Concord. November 29, 2011.
- **29.** Email. Robin Johnson, EPA to Kathleen Keohane, MassDEP. RE: Concord. November 30, 2011.
 - i. Attachment: Appendix A.xlsx
 - ii. Attachment: Appendix C Aluminum calculations.xlsx

- iii. Attachment: Appendix E Copper Calculations(Autosaved).xlsx
- iv. Attachment: Concord Draft Fact Sheetbp2.docx
- v. Attachment: Concord Draft Permit.docx
- vi. Attachment: Permit Attachment C Required Reports.docx
- **30.** Email. Kathleen Keohane, MassDEP to Robin Johnson, EPA. RE: Concord. December 7, 2011.
- **31.** Email. Kathleen Keohane, MassDEP to Robin Johnson, EPA. RE: Concord. December 7, 2011.
- **32.** Email. Robin Johnson, EPA to Kathleen Keohane, MassDEP. RE: Concord. December 8, 2011.
- **33.** Email. Kathleen Keohane, MassDEP to Robin Johnson, EPA. RE: Concord 7Q10 and 30Q10. January 4, 2012.
- **34.** Email. Kathleen Keohane, MassDEP to Robin Johnson, EPA. RE: FW: Comments on Concord. January 6, 2012.
 - i. Attachment: Permit Attachment C Required Reports cag comments.docx
 - ii. Attachment: Concord Draft Permit cag comments.docx
 - iii. Attachment: Concord Draft Fact Sheetbp2 cag comments.docx
- **35.** Email. Brian Pitt, EPA to Robin Johnson, EPA. RE: Concord Fact Sheet. March 23, 2012.
- **36.** Email. Alan Cathcart, Town of Concord to Robin Johnson, EPA. RE: Concord MA WWTF NPDES MA0100668. Transmittal of pre-public notice comments. April 23, 2012.
- **37.** Email. Robin Johnson, EPA to Betsy Davis, EPA. RE: DEHP question. April 23, 2012.
- **38.** Email. Robin Johnson, EPA to Alan Cathcart, Town of Concord. RE: Concord MA WWTF NPDES MA0100668. April 23, 2012.
- **39.** Email. Alan Cathcart, Town of Concord to Robin Johnson, EPA. RE: Concord MA WWTF NPDES MA0100668. Transmittal of MEPA Certificates. April 23, 2012.
- **40.** Email. Richard Friend, MassDEP to David Pincumbe, EPA. RE: Residential gallons. June 19, 2012.

- 41. Letter. Richard Reine, Town of Concord to Brian Pitt, EPA. RE: NPDES Permit No. MA0100668 Concord Wastewater Treatment Facility (WWTF) Capacity. Request for integrated planning process and NPDES permit delay. June 20, 2012.
- **42.** Email. Alison Field-Juma, OARS to Robin Johnson, EPA. RE: Restoring the Water Balance. June 27, 2012.
- **43.** Phone Log. Robin Johnson, EPA to Alison Field-Juma, OARS. RE: Concord NPDES permit. July 26, 2012.
- **44.** Phone Log. Sue Beede, member of OARS to Robin Johnson, EPA. RE: Water quality criteria, metals assumptions, etc. July 31, 2012.
- **45.** Email. Robin Johnson, EPA to Alison Field-Juma, OARS. RE: Concord NPDES Application. Transmittal of MA0100668 reapplication materials. July 31, 2012.
- **46.** Email. Robin Johnson, EPA to Lee Steppacher, Department of Interior. RE: Concord WWTP. Transmittal of simplified 7Q10 calculation in response to inquiry. August 9, 2012.
- **47.** Email. Robin Johnson, EPA to Amy Clark, New Hampshire Department of Environmental Services. RE: pH waiver. August 24, 2012.
- **48.** Email. Jim Lazorchak, EPA to Vickie Wilson, EPA. RE: Assabet In Vitro Data. November 26, 2012.
- **49.** Email. Vickie Wilson, EPA to Jim Lazorchak, EPA. RE: Assabet In Vitro Data. November 27, 2012.
- **50.** Email. Jim Lazorchak, EPA to Vickie Wilson, EPA. RE: Assabet In Vitro Data. November 27, 2012.
- **51.** Email. Robin Johnson, EPA to Claire Golden, MassDEP. RE: Concord Response to Comments and Final Permit. June 20, 2013.
 - i. Attachment: Concord Final Permit.docx
 - ii. Attachment: Concord RTC_6-20-2013.docx
 - iii. Attachment: Concord RTC APPENDIX A.docx
 - iv. Attachment: Concord 7Q10 Map.docx
- **52.** Email. Claire Golden, MassDEP to Robin Johnson, EPA. RE: Concord Response to Comments and Final Permit. June 27, 2013.
 - i. Attachment: Concord RTC MassDEP comments.docx

- ii. Attachment: Concord RTC Attachment A MassDEP comments.docx
- iii. Attachment: Concord Final Permit MassDEP comments.docx
- **53.** Email. Robin Johnson, EPA to Claire Golden, MassDEP. RE: Concord Response to Comments and Final Permit. June 27, 2013.
 - i. Attachment: Concord RTC MassDEP comments.docx
 - ii. Attachment: Concord RTC Attachment A MassDEP comments.docx
 - iii. Attachment: Concord Final Permit MassDEP comments.docx
- **54.** Email. Claire Golden, MassDEP to Robin Johnson, EPA. RE: Concord Response to Comments and Final Permit. June 28, 2013.
 - i. Attachment: Concord RTC FINAL.docx
 - ii. Attachment: Concord RTC Attachment A-FINAL.docx
 - iii. Attachment: Concord Final Permit FINAL.docx

F. 303(D) and 305(B) MATERIALS

- Massachusetts Department of Environmental Protection. April 2010.
 Massachusetts 2010 Integrated List of Waters: Final Listing of the
 Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and
 303(d) of the Clean Water Act. Published online at:
 http://www.mass.gov/eea/docs/dep/water/resources/07v5/10list6.pdf
- 2. Massachusetts Department of Environmental Protection. March 2013. Massachusetts 2012 Integrated List of Waters: Final Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act. Published online at: http://www.mass.gov/eea/docs/dep/water/resources/07v5/12list2.pdf

G. <u>SITE-SPECIFIC BACKGROUND STUDIES, REPORTS AND INFORMATION</u>

- 1. Town of Concord, Massachusetts. Comprehensive Wastewater Management Plan Summary. February 2003.
- Massachusetts Department of Environmental Protection. August 2005. SuAsCo Watershed 2001 Water Quality Assessment Report. Published online at:

- $\frac{http://www.mass.gov/eea/docs/dep/water/resources/71wqar09/82wqar1.pd}{f}$
- **3.** Environmental Protection Agency. April 24, 2013. Assabet River Water Quality Survey July 10-13, 2012.
- **4.** OARS Water Quality Monitoring Program 2011 Annual Report. July 2012. http://www.oars3rivers.org/sites/default/files/OARS-WQ-2011-Report(online).pdf
- 5. OARS Water Quality Monitoring Program Final Report 2009 2010 Field Seasons. http://www.oars3rivers.org/sites/default/files/OARS-WQ-2009-2010-Report_0.pdf
- 6. Massachusetts Department of Environmental Protection. Draft Pathogen TMDL for the Concord River Watershed. http://www.mass.gov/eea/docs/dep/water/resources/a-thru-m/concord1.pdf

H. OTHER TECHNICAL AND SCIENTIFIC DOCUMENTS

- United States Geological Survey. Gazetteer of Hydrologic Characteristics of Streams in Massachusetts Merrimack River Basin. USGS Water Investigations Report 84-4284. http://pubs.usgs.gov/wri/1984/4284/report.pdf
- Charles River Watershed Association. 2008. Resource, Environmental and Land (REAL) Planning. Littleton Case Study. Published online at: http://crwa.org/projects/EZ/ez.html
- Massachusetts Executive Office of Energy and Environmental Affairs and the Adaptation Advisory Committee. September 2011. Massachusetts Climate Change Adaptation Report. Published online at: http://www.mass.gov/eea/docs/eea/energy/cca/eea-climate-adaptation-report.pdf
- **4.** Fagin, Dan. October 24, 2012. Toxicology: the Learning Curve. Nature. Published online at: http://www.nature.com/news/toxicology-the-learning-curve-1.11644
- Massachusetts Department of Environmental Protection. 2011 Public Water Supply Annual Statistical Report for the Concord Water Department.
- Massachusetts Department of Environmental Protection. 2009 Public Water Supply Annual Statistical Report for the Billerica Water Department.

- Massachusetts Department of Environmental Protection. 2010 Public Water Supply Annual Statistical Report for the Billerica Water Department.
- **8.** Mitchell, Liebman, Lamsmayer, and Card. Rifles vs. Reservoirs: Nutrient Criteria and Downstream Effects.
- Charles River Watershed Association. January 4, 2012. Littleton, Massachusetts Smart Sewering Strategy. Sustainable Wastewater Treatment Infrastructure: Engineering Concept Report. Published online at: http://www.littletonma.org/filestorage/49/3594/7918/LittletonSmartSeweringStrategy-Jan2012-CRWA-NSU.pdf
- 10. American Water. Gillette Stadium Wastewater Treatment System Case Study. Published online at: http://www.amwatersolutions.com/uploads/projects/casestudies/CaseStudy_1_AMER0158_Project%20Sheets_Gillette_Revised3ee27121-bc8c-40c2-83b6-b70ba2ba5a2e.pdf
- 11. Massachusetts Department of Environmental Protection. 2012. Standards and Guidelines for Contaminants in Massachusetts Drinking Waters. http://www.mass.gov/dep/water/dwstand.pdf
- 12. Town of Concord. Wastewater Planning Task Force Summary Report: An Integrated Planning to Supplement the Findings of *The Status of Municipal Wastewater Treatment in Concord, Massachusetts.*

I. EPA GUIDANCE

- Environmental Protection Agency. 1986. Quality Criteria for Water 1986. Also known as the "Gold Book." United States Environmental Protection Agency, Office of Water, Regulations and Standards. EPA 440/5-86-001. http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/upload/2 009 01 13 criteria goldbook.pdf
- Environmental Protection Agency. 1988. Ambient Water Quality for Aluminum – 1988. United States Environmental Protection Agency, Office of Water Regulations and Standards, Criteria and Standards Division. EPA 440/5-86-008. http://water.epa.gov/scitech/swguidance/standards/criteria/upload/AWQC-for-Aluminum_1988.pdf
- 3. Environmental Protection Agency. 1991. Technical Support Document for Water Quality-based Toxics Control. United States Environmental Protection Agency, Office of Water. EPA/505/2-90-001.

- **4.** Environmental Protection Agency. 1996. U.S. EPA NPDES Permit Writer's Manual. United States Environmental Protection Agency, Office of Water. EPA-833-B-96-003.
- Environmental Protection Agency. National Recommended Water Quality Criteria: 2002. November 2002. United States Environmental Protection Agency, Office of Water, Office of Science and Technology. http://water.epa.gov/scitech/swguidance/standards/upload/2008_04_29_criteria_wqctable_nrwqc-2002.pdf
- 6. Environmental Protection Agency. National Recommended Water Quality Criteria: 2009. 2009. United States Environmental Protection Agency, Office of Water, Office of Science and Technology. http://water.epa.gov/scitech/swguidance/standards/criteria/current/upload/nrwqc-2009.pdf
- Environmental Protection Agency. January 2008. Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities. EPA 832-R-08-002. http://water.epa.gov/infrastructure/sustain/upload/Final-Energy-Management-Guidebook.pdf
- 8. Environmental Protection Agency. 2010. U.S. Environmental Protection Agency NPDES Permit Writer's Manual. United States Environmental Protection Agency, Office of Wastewater Management, Water Permits Division, State and Regional Branch. EPA-833-K-10-001. September 2010. http://www.epa.gov/npdes/pubs/pwm 2010.pdf
- 9. Environmental Protection Agency. 2011. Memorandum: Achieving Water Quality Standards through Integrated Municipal Stormwater and Wastewater Plans. United States Environmental Protection Agency, Office of Water and Office of Enforcement and Compliance Assistance. http://www.epa.gov/npdes/pubs/memointegratedmunicipalplans.pdf
- Environmental Protection Agency. 2012. Water Quality Standards Handbook. EPA-823-B-12-002. http://water.epa.gov/scitech/swguidance/standards/handbook/
- 11. Environmental Protection Agency. 2012. Memorandum: Integrated Municipal Stormwater and Wastewater Planning Framework. United States Environmental Protection Agency, Office of Water and Office of Enforcement and Compliance Assistance. http://www.epa.gov/npdes/pubs/integrated_planning_framework.pdf
- 12. Environmental Protection Agency. 2000. Ambient Water Quality Criteria Recommendations: Rivers and Streams in Ecoregion XIV. EPA 822-B-00-022. http://www2.epa.gov/sites/production/files/documents/rivers8.pdf

J. OTHER

- 1. Certificate on the Single Environmental Impact Report for Concord Comprehensive Wastewater Management Plan. April 9, 2004.
- 2. Meeting Notes. Robin Johnson, EPA. Site Visit at Concord WWTF. June 22, 2011.
- **3.** Meeting Notes. Robin Johnson, EPA. Meeting with the Town of Concord. June 6, 2012.
- United States Geological Survey. Daily Discharge Data for USGS 01099500 CONCORD R BELOW R MEADOW BROOK, AT LOWELL, MA, January 1, 1970 – March 31, 2012.
- United States Geological Survey. Daily Discharge Data for 01097000 ASSABET RIVER AT MAYNARD, MA, January 1, 1970 – March 31, 2012.
- 6. Discharge Monitoring Reports:
 - i. Concord, Massachusetts WWTP, NPDES Permit No. MA0100668. January 31, 2006 September 31, 2013.
 - Maynard, Massachusetts WWTF, NPDES Permit No. MA0101001. January 31, 2009 – December 31, 2010.
- 7. Whole Effluent Toxicity Reports:
 - Concord, Massachusetts WWTP, NPDES Permit No. Ma0100668.
 March 2008 December 2010.
- 8. Endangered Species Consultation webpage. http://www.fws.gov/newengland/EndangeredSpec-Consultation_Project_Review.htm
- Fact Sheet for Isotria medeoloides. http://www.fws.gov/midwest/endangered/plants/smallwhorledpogoniafs.ht ml
- **10.** Oram, Brian. Alkalinity- The Protector of the Stream. Water Research Center. http://www.water-research.net/Watershed/alkalinity.htm