

DOCKET NO. D-1985-074 CP-3

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Town of Fallsburg
Loch Sheldrake Wastewater Treatment Plant
Town of Fallsburg, Sullivan County, New York**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by CDM Smith on behalf of the Town of Fallsburg (docket holder) on September 22, 2014 (Application), for renewal of the docket holder's existing Loch Sheldrake wastewater treatment plant (WWTP) and its discharge, as well as approval to expand the WWTP to accommodate growth within the existing service area. State Pollutant Discharge Elimination System (SPDES) Permit No. NY0024538 for the existing facility was issued by the New York State Department of Environmental Conservation (NYSDEC) on November 4, 2011, effective December 1, 2011. The docket holder submitted an application to the NYSDEC on September 16, 2014 requesting draft Permit limits for the expansion. The NYSDEC is awaiting approval of this docket before issuing a SPDES Permit with effluent limits for the requested expansion. Following SPDES approval the docket holder will be required to submit an application for Plan Approval to the NYSDEC. This docket requires Plan Approval to be issued by the NYSDEC prior to the start of construction at the site (See DECISION Condition II.a.).

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Sullivan County Planning Department has been notified of pending action. A public hearing on this project was held by the DRBC on March 10, 2015.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew approval of the docket holder's existing 0.7 million gallons per day (mgd) WWTP and its discharge. This docket also approves an expansion of the WWTP to 1.013 mgd to accommodate growth within the existing service area.

2. **Location.** The existing and proposed WWTPs will continue to discharge treated effluent to Sheldrake Stream at River Mile 253.64 – 27.3 – 9.83 (Delaware River – Neversink River – Sheldrake Stream) via Outfall No. 001, within the drainage area to the Middle Delaware Special Protection Waters (SPW), in the Town of Thompson, Sullivan County, New York as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 46' 00"	74° 39' 13"

3. **Area Served.** The docket holder's existing/expanded WWTP will continue to serve the Loch Sheldrake Sewage District in the Town of Thompson, Sullivan County, New York. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder will continue to operate its existing 0.7 mgd WWTP. In order to accommodate growth within the existing service area, the docket holder will also perform construction at the WWTP that will result in an expansion to 1.013 mgd.

b. **Facilities.** The existing WWTP consists of a manual bar screen, an aerated grit chamber, two (2) primary settling tanks, two (2) trains of rotating biological contactors (RBCs), two (2) final settling tanks, a gravity thickener, two (2) anaerobic digesters, seven (7) sludge drying beds, a belt filter press, and a chlorine contact tank.

The expanded WWTP will consist of a parshall flume, a bar screen, an aerated grit chamber, an equalization tank, a splitter box, and two (2) or three (3) treatment trains each consisting of the following: a primary settling tank, a fine screen, a first stage anoxic tank, a first stage aerobic tank, a swing zone tank, a membrane bioreactor (MBR), a peracetic acid or ultraviolet (UV) light disinfection unit, and cascade aeration. DECISION Condition II.y. requires the docket holder to submit Final Plans and Specifications to the Commission's Executive Director for review and receive approval prior to the start of construction.

The docket holder's existing/expanding wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The existing WWTP has a generator installed capable of providing emergency power. During construction of the expansion the docket holder will modify the power source if necessary to ensure it can handle the increased facility size in the event of a power outage (See DECISION Condition II.r.).

The docket holder's existing/expanding wastewater treatment facility is not/will not be staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements. The docket holder is required as part of the expansion to update the remote alarm systems (See DECISION Condition II.r.) to ensure all vital operations are monitored.

The docket holder's existing/expanding wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements.

The docket holder has satisfactorily proved the technical infeasibility of using natural wastewater treatment technologies in accordance with the Commission's SPW requirements. A report was submitted as part of the docket application for D-1985-074 CP-2 that included overland flow, drip irrigation, and spray irrigation as natural treatment options and concluded that soil conditions were not favorable and land was not available in the proper quantity for such technologies to be included. Commission staff continue to agree with this assessment.

The project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a state-approved facility.

c. Water withdrawals. The potable water supply in the project service area is supplied by the docket holder's water supply system, which was approved on September 10, 2014 via Docket No. D-90-105 CP-3.

d. SPDES Permit / DRBC Docket. SPDES Permit No. NY0024538 was issued by the NYSDEC on November 4, 2011 (effective December 1, 2011) and includes final effluent limitations for the project discharge of 0.7 mgd to surface waters classified by the NYSDEC as a Class B stream, which is best used for swimming, recreation, and fishing. The following average monthly effluent limits are among those listed in the SPDES Permit for the existing 0.7 mgd WWTP and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in SPDES Permit

OUTFALL 001 (0.7 mgd WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9	As required by SPDES Permit
Total Suspended Solids	30 mg/l, 175 lbs/day	As required by SPDES Permit
Dissolved Oxygen	4.0 mg/l (minimum at all times)	As required by SPDES Permit
BOD (5-Day at 20° C)	30 mg/l, 175 lbs/day, 85% minimum removal	As required by SPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	9.3 mg/l Monitor & Report	As required by SPDES Permit
Fecal Coliform (5-1 to 10-31)	200 colonies per 100 ml as a geo. avg.	As required by SPDES Permit
Phosphorus	2.9 lbs/day	As required by SPDES Permit
Total Dissolved Solids*	Monitor & Report	As required by SPDES Permit
Total Kjeldahl Nitrogen	Monitor & Report	As required by SPDES Permit
Nitrate + Nitrite as N	Monitor & Report	As required by SPDES Permit

* See DECISION Condition II.v.

The requirements in EFFLUENT TABLE A-2 are for the expanded 1.013 mgd WWTP (See DECISION Condition II.d.). The docket holder submitted an application to the NYSDEC on September 16, 2014 requesting draft Permit limits for the expansion. The NYSDEC is awaiting approval of this docket before issuing a draft SPDES Permit with effluent limits for the requested expansion, but have informed Commission staff that the Commission's requirements will be more stringent for all parameters except phosphorous. As a result, EFFLUENT TABLE A-2 includes the expected NYSDEC effluent limitation for phosphorous. All other requirements are Commission basin-wide and/or SPW specific parameters, developed through the implementation of the December 2014 Neversink River Water Quality Model (NR-WQM), and must be met as a condition of this docket approval for the expanded WWTP. Commission staff have requested NYSDEC to include these parameters in their renewed Permit.

EFFLUENT TABLE A-2: DRBC Parameters Expected to be Included in the Renewed SPDES Permit

OUTFALL 001 (1.013 mgd WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9	Daily
Total Suspended Solids	197.75 lbs/day	Twice/Month
Dissolved Oxygen	5.0 mg/l (minimum)	Daily
BOD (5-Day at 20° C)	82.15 lbs/day, 85% minimum removal	Twice/Month
Fecal Coliform (5-1 to 10-31)	200 colonies per 100 ml as a geo. avg.	Twice/Month
Phosphorus	2.9 lbs/day*	Twice/Month
Ammonia Nitrogen (5-1 to 9-30) (10-1 to 4-30)	15.74 lbs/day 31.48 lbs/day	Twice/Month Monthly
TKN (5-1 to 9-30) (10-1 to 4-30)	35.80 lbs/day 71.6 lbs/day	Twice/Month Monthly
Nitrate + Nitrite as N (5-1 to 9-30) (10-1 to 4-30)	19.74 lbs/day 39.48 lbs/day	Twice/Month Monthly
Total Dissolved Solids**	1,000 mg/l	Quarterly

* See DECISION Condition II.v.

** NYSDEC Requirement that is more stringent than the Commission's December 2014 NR-WQM established requirement of 10.47 lbs/day

The DRBC will restrict loadings to the receiving stream to protect water quality and not concentrations for SPW parameters. For information purposes, the corresponding May thru September concentrations associated with the SPW loadings at the full permitted discharge flow of 1.013 mgd are as follows:

PARAMETER	CONCENTRATION
BOD (5-Day at 20° C)	9.72 mg/l
Total Suspended Solids	23.4 mg/l
Ammonia Nitrogen	1.86 mg/l
TKN	4.23 mg/l
Nitrate + Nitrite as N	2.33 mg/l

e. **Cost.** The overall cost of this project is estimated to be \$10,876,800.

f. **Relationship to the Comprehensive Plan.** The 0.7 mgd Loch Sheldrake WWTP was included in the Comprehensive Plan upon approval of Docket No. D-85-74 CP on November 25, 1986. Issuance of this docket will continue approval of the 0.7 mgd WWTP in the Comprehensive Plan and include the expansion to 1.013 mgd (See DECISION Condition I.c.).

B. **BACKGROUND**

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *WQR* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program.

The project WWTP will continue to discharge to Sheldrake Stream, which is a tributary of the Neversink River and is located within the drainage area to the Commission's Middle SPW area. The Neversink River joins the Delaware River at River Mile 253.64, which is designated as Significant Resource Waters (SRW).

Section 3.10.3.A.2.c.2) of the Commission's *WQR* requires that new wastewater treatment facilities and existing wastewater treatment facilities that are proposing substantial alterations and additions "may be approved only after the applicant demonstrates that it has fully evaluated all natural wastewater treatment system alternatives and is unable to implement these alternatives because of technical and/or financial infeasibility." The docket holder has satisfactorily proved the technical infeasibility of using natural wastewater treatment technologies in accordance with the Commission's SPW requirements. A report was submitted as part of the Application for Docket No. D-1985-074 CP-2 that included overland flow, drip irrigation, and spray irrigation as natural treatment options and concluded that soil conditions were not favorable and land was not available in the proper quantity for such technologies to be included. Commission staff agree with this conclusion and therefore natural wastewater treatment technologies are not required.

Section 3.10.3.A.2.d.8) of the Commission's *WQR* requires that new wastewater treatment facilities and existing wastewater treatment facilities that are proposing substantial

alterations and additions demonstrate “...that the project will cause no measurable change to Existing Water Quality...” Section 3.10.3.A.2.d.9) of the Commission’s *WQR* states that “For wastewater treatment facility projects subject to the no measurable change requirement, the demonstration of no measurable change [NMC] to existing water quality [EWQ] shall be satisfied if the applicant demonstrates that the new or incremental increase in the facility’s flow or load will cause no measurable change at the relevant water quality control point for the parameters denoted by asterisks in Tables 1 and 2 of this section: ammonia (NH₃ N); dissolved oxygen (DO); fecal Coliform (FC); nitrate (NO₃ N) or nitrite + nitrate (NO₂ N+ NO₃ N); total nitrogen (TN) or Kjeldahl nitrogen (TKN); total phosphorous (TP); total suspended solids (TSS); and biological oxygen demand (BOD) (Table 1 only).”

The project WWTP is an expanding wastewater treatment facility and is subject to the NMC to EWQ requirement. NMC to EWQ is to be demonstrated at the Neversink River Boundary Control Point (BCP). The Neversink BCP is located near the confluence of the Neversink and Delaware Rivers (Table 1 - Part C of Section 3.10.3.A.2.g. of the Commission’s *WQR*).

Section 3.10.3.A.2.a.4) of the Commission’s *WQR* defines “Measurable Change” as “an actual or estimated change in a seasonal or non-seasonal mean (for SPW waters upstream of and including River Mile 209.5) or median (for SPW waters downstream of River Mile 209.5) in-stream pollutant concentration that is outside the range of the two-tailed upper and lower 95 percent confidence intervals that define existing water quality.”

EWQ is defined as the actual concentration of a water constituent at an in-stream site or sites, as determined through field measurements and laboratory analysis of data collected over a time period determined by the Commission to adequately reflect the natural range of the hydraulic and climatologic factors which affect water quality. EWQ is described in terms of:

- (a) an annual or seasonal mean of the available water quality data,
- (b) two-tailed upper and lower 95 percent confidence limits around the mean, and
- (c) the 10th and 90th percentiles of the data set from which the mean was calculated.

The determination of NMC is based on a comparison of historical water quality observations at the Neversink BCP with the modeled (predicted) EWQ at the Neversink BCP. Historical water quality observations were used by Commission staff to define EWQ for the BCP, and were derived from EPA Storet (NYSDEC, USGS, etc.) data prior to 1993. The EWQ that is protected at the BCP is that which existed at the time of SPW classification in 1992 (1992-EWQ).

Commission staff compiled data for the eight parameters (NH₃ N, DO, FC, NO₂ N + NO₃ N, TKN, TP, TSS, and BOD) necessary to define 1992-EWQ as part of the docket approval for Gemstar Development Corporation’s Heiden Road WWTP approved by the Commission in Docket No. D-2008-018 CP-1 on October 22, 2009. The mean and upper 95th percentile data was compiled and EWQ at the Neversink BCP was determined to have the following characteristics:

Table B-1: EWQ for the Neversink River BCP

PARAMETER	MEAN	UPPER 95 TH %
NH ₃ N (ug/l)	71	91
DO (mg/l)	9.18	8.91
FC (#/100ml)	92.90	116.95
NO ₂ N+ NO ₃ N (ug/l)	384	433
TKN (ug/l)	378	451
TP (ug/l)	99	138
TSS (mg/l)	5.5	6.3
CBOD (mg/l)	1.27	1.5

In 2009, Commission staff completed a water quality model, using the USEPA's QUAL2K platform, for the Neversink River Watershed. The 2009 NR-WQM was used to analyze the impact to 1992-EWQ at the BCP from the proposed 0.024 mgd Heiden Road WWTP. Section 3.10.3.A.2.d.9) of the WQR further states "In making the demonstration required in the preceding sentence the applicant shall use a DRBC-approved model of the tributary or main stem watershed if available." Commission staff developed the 2009 NR-WQM in order to evaluate new and expanding wastewater treatment facilities that were located in the Neversink River watershed. The 2009 NR-WQM was used to develop effluent limitations protective of the EWQ described in Table B-1.

The 2009 NR-WQM's domain included the watershed downstream of the Neversink Reservoir. The 2009 NR-WQM was calibrated using in-stream water quality data sets from pre-1993 and current watershed-wide WWTP discharge information available from the discharge monitoring reports (DMRs). The model assumed that all existing WWTPs will eventually discharge at their full permitted (or docketed) design flows and loads. In addition it also assumed that all new or expanding WWTPs will discharge at their proposed design flow and loads. For those contaminants for which there was no discharge information, typical effluent data was used from facilities in similar watersheds. The 2009 NR-WQM included data from fifteen (15) existing WWTPs whose facility name and size are listed below in Table B-2. Where DMR values did not exist for certain parameters, Best Professional Judgment (BPJ) was used for data from similar facilities to derive typical effluent concentrations. Rate constants for nitrification, oxidation, hydrolysis, and denitrification were selected from the QUAL2K user manual recommendations and the EPA Technical Guidance for Developing TMDLs.

Table B-2

FACILITY	NYSDEC PERMITTED DISCHARGE (MGD)	SPDES Permit No.	DRBC Docket No.
Kiamesha Lake	2.0	NY0030724	D-1989-011 CP-1
Camp Ohr Shalom	0.07	NY0271179	D-2013-005 CP-1
Davos in the Woods *	0.25	NY0218987	---
Mountain Hill Cottages	0.014	NY0096067	D-2005-002-1
Emerald Green	0.41	NY0035645	D-1995-016 CP-1

FACILITY	NYSDEC PERMITTED DISCHARGE (MGD)	SPDES Permit No.	DRBC Docket No.
Dragon Spring Buddhist Inc.**	0.1	NY0274089	D-2007-021 CP-2
Otisville Federal Correction Institute	0.5	NY0037397	D-1994-011 CP-1
Monticello	3.1	NY0022454	D-1981-038 CP-2
Avon (formerly Woodridge)	0.79	NY0023493	D-1981-066 CP-2
Melody Lake	0.038	NY0030708	D-2011-025 CP-1
Port Jervis	2.5	NY0026522	D-2004-028 CP-2
Loch Sheldrake	0.7	NY0145696	D-1985-074 CP-2
WHO	3.26	NY0024520	D-1967-069 CP-2
Beaver Lake Estates	0.14	NY0145734	D-2009-038 CP-1
Gemstar	0.024	NY0272892	D-2009-018 CP-1

* Application Request Letter Sent

** Indicates Active Project Applications with the Commission

In addition to the 15 facilities listed above with active SPDES permits/DRBC docket, Commission staff also received **notice or applications** (either from the NYSDEC, the project sponsor and/or from Town Planning boards) for 7 new wastewater treatment projects and 3 expansions of existing wastewater treatment projects planned for the Neversink watershed.

In order to determine compliance with the NMC requirement, Commission staff used the 2009 NR-WQM to evaluate several discharge scenarios. These scenarios included all 15 SPDES permitted dischargers with permitted flows equal to or greater than (\geq) 10,000 gpd within the NR-WQM domain, the Heiden Road WWTP, and the discharge of the 10 proposed new or expanding WWTPs.

The model was used to predict in-stream concentrations of NH₃ N, DO, FC, NO₂ N + NO₃ N, TKN, TP, TSS, and BOD under different discharge scenarios for the Heiden Road WWTP.

Commission staff updated the 2009 NR-WQM to reflect data collected since the Heiden Road WWTP approval on October 22, 2009 including data on twelve WWTPs not previously included in the model domain (See Table B-3), but have existing SPDES Permits and discharge to the Neversink watershed. Commission staff also established the grandfathered load for each existing facility (based on 1992 discharges). As such, the 2009 NR-WQM was recalibrated with this data. The Heiden Road WWTP and Beaver Lake Estates WWTP (approved March 3, 2010) were incorporated as existing facilities for the purpose of establishing effluent limits for other than in-house facilities (the Deb-El IWTP and WHO & Loch Sheldrake WWTPs). The updated model version used to analyze projects after the Beaver Lake Estates WWTP was referenced as the August 2010 NR-WQM.

Table B-3

FACILITY	NYSDEC PERMITTED DISCHARGE (MGD)	SPDES Permit No.
Jened Recreation	0.036	NY0030562
Kutcher's Country	0.2	NY0033600
Glen Wild Hotel	0.013	NY0095877
Nachlas Enunah Bu	0.0513	NY0148164
Yellow Park Apartments	0.0062	NY0148211
Kiamesha Artesian	0.0012	NY0166090
Dillon Farms	0.002	NY0214507
Old Homestead	0.0045	NY0219576
Kutcher's Sports	0.0325	NY0249939
Huguenot Camp	0.0202	NY0250058
Victoria Colony	0.0056	NY0250813
Kyprianou	0.0008	NY0259250

To determine the net potential impacts to the 1992-EWQ at the BCP as a result of the in-house facility discharges, the Commission staff first used the August 2010 NR-WQM to establish grandfathered loadings for all facilities in Tables B-2 and B-3 that were in existence in 1992 (See Table B-4). Commission staff then analyzed each facility as it was permitted to discharge in 2010 and calculated the equal effluent concentrations (EEC) required for the non-grandfathered load of each facility to establish effluent limits for each parameter (see Table B-5).

Table B-4: August 2010 NR-WQM Existing/Grandfathered Results

Model Run	BOD5 (mg/l)	TSS (mg/l)	Total P (ug/l)	Nitrate – Nitrite N (ug/l)	TKN (ug/l)	Ammonia – N (ug/l)	D.O. (mg/l)
Mean	1.27	5.5	99	385	378	71	9.18
95% C.L. (EWQ Target)	1.5	6.3	138	433	451	91	8.91
1992 Grandfathered Condition for facilities in Tables B-2 and C-1	1.09	1.27	87	381	378	71	9.17

Table B-5: August 2010 NR-WQM EEC

	BOD5 (mg/l)	TSS (mg/l)	Total P (mg/l)	Nitrate – Nitrite N (mg/l)	TKN (mg/l)	Ammonia – N (mg/l)
EEC	13.5	30	1.3	1.9	3.8	1.7

Since Deb-El was a new IWTP that did not exist in 1992, effluent limits for this facility are the same as those established in the August 2010 NR-WQM EEC model run.

On December 8, 2011 the Commission approved Docket No. D-2011-008 CP-1 for the 0.135 mgd Lost Lake Resort WWTP, whose 10-year build out was predicted to be 0.22 mgd. The NR-WQM was updated and ran in October 2011 to establish EECs for the 10-year projected flow of 0.22 mgd. Grandfathered loads continued to be calculated as previously done on an annual basis and therefore the inputs from Table B-4 did not change. The new EECs established for the Lost Lake WWTP are found in Table B-6 below.

Table B-6: October 2011 NR-WQM EEC

	BOD5 (mg/l)	TSS (mg/l)	Total P (mg/l)	Nitrate – Nitrite N (mg/l)	TKN (mg/l)	Ammonia – N (mg/l)
EEC	13.51	30	1.33	1.91	3.8	1.68

With the addition of Deb-El and Lost Lake (listed in Table B-7) the total number of facilities in the NR-WQM as of October 2011 was twenty-nine (29).

Table B-7

FACILITY	Model Design Discharge (MGD)	SPDES Permit No.	DRBC Docket No.
Deb-El	0.05	NY0272779	D-2009-036-2
Lost Lake Resort	0.22	---	D-2011-008 CP-1

Commission staff updated the October 2011 NR-WQM to reflect data collected since the Lost Lake WWTP approval on December 8, 2011. Commission staff then analyzed each facility as it was permitted to discharge in 2011 and calculated the EECs required for the non-grandfathered load portion of each facility that had not undergone substantial alterations or additions from 2009-2011 to establish effluent limits for each SPW parameter for the 0.131 mgd RALHAL WWTP (see Table B-8). This new iteration of the model was the February 2013 NR-WQM and contained thirty (30) facilities.

Table B-8: February 2013 NR-WQM EEC

	BOD5 (mg/l)	TSS (mg/l)	Total P (mg/l)	Nitrate – Nitrite N (mg/l)	TKN (mg/l)	Ammonia – N (mg/l)
EEC	12.94	30	1.67	1.43	3.5	1.43

C. FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing 0.7 mgd WWTP and its discharge. This docket also approves an expansion of the WWTP to 1.013 mgd to accommodate growth within the existing service area.

Docket No. D-1985-074 CP-2 was approved by the Commission on March 6, 2013 and included grandfathered loads (See Table C-1) for the docket holder's existing WWTP.

Table C-1: Loch Sheldrake WWTP's Grandfathered Loads

Months	BOD₅ (lbs/day)	TSS (lbs/day)	Total P (lbs/day)	Nitrate + Nitrite as N (lbs/day)	TKN as N (lbs/day)	Ammonia – as N (lbs/day)
May-Sept*	21.9	17	3.0	15.7	18.2	11.4

* Grandfathered Loads are associated with a flow of 0.291 mgd

Commission staff updated the February 2013 NR-WQM to reflect data collected since the RALHAL WWTP approval on March 5, 2013 and to include application requests from Ocorealty LLC, Dragon Springs Buddhist, Inc., and the Town of Fallsburg, for The Orchards, Dragon Springs, and Loch Sheldrake WWTPs, respectively. Commission staff then analyzed treatment facility location with respect to surface water impoundments and existing stream water quality where each facility was discharging and calculated the effluent concentrations required for the non-grandfathered load portion of each facility that has not undergone substantial alterations or additions in the past three years to establish effluent limits for each SPW parameter for the expanded WWTP (see Table C-2). This new iteration of the model is the December 2014 NR-WQM and contains thirty-three (33) facilities.

Table C-2: December 2014 NR-WQM EEC

	BOD₅ (mg/l)	TSS (mg/l)	Total P (mg/l)	Nitrate + Nitrite N (mg/l)	TKN (mg/l)	Ammonia – N (mg/l)
EEC	10	30	1.24	0.67	2.92	0.72

The docket holder's WWTP effluent loading limits for the expanded WWTP are defined in EFFLUENT TABLE A-2 of this docket and are based upon the combined loads from both Tables C-1 and C-2 above. The DRBC restricts loading to the receiving stream to protect water quality and not concentrations for SPW parameters. The corresponding May thru September concentrations associated with the SPW loadings at the full permitted discharge flow of 1.013 mgd have been included above for information purposes. The effluent limits found in EFFLUENT TABLE A-2 of this docket are required of the expanded WWTP to prevent a measurable change to EWQ after all 33 wastewater treatment facilities with active SPDES permit/DRBC Dockets are taken into account.

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project does entail additional construction and expansion of facilities (i.e., there are new or increased non-point source loads associated with this approval), the NPSPCP requirement is applicable at this time. Accordingly, DECISION Conditions II.q. and II.x. have been included in this docket.

The docket holder's WWTP discharges to Sheldrake Stream on Evans Lake and therefore a low flow could not be established at the point of discharge.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 97 River Miles downstream of the docket holder's WWTP, and is operated by the City of Easton.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The effluent limits in the SPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission's *WQR*.

C. DECISION

I. Effective on the approval date for Docket No. D-1985-074 CP-3 below:

a. The project described in Docket No. D-1985-074 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1985-074 CP-3; and

b. Docket No. D-1985-074 CP-2 is terminated and replaced by Docket No. D-1985-074 CP-3; and

c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be added to/ continued in the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC in its SPDES Permit and Plan Approval, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

d. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email aemr@drbc.state.nj.us on the **Annual Effluent Monitoring Report Form** located at this web address: <http://www.state.nj.us/drbc/programs/project/application/index.html>. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

i. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

j. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder’s professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (2) report the project’s final construction cost as such cost is defined by the project review fee schedule in effect at the time the application was made; and (3) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the docket holder to calculate the DRBC project review fee, the statement must also include (4) the amount of any outstanding balance owed for DRBC review. The outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project’s final cost, using the formula and definition of “project cost” set forth in the DRBC’s project review fee schedule in effect at the time application was made.

k. The WWTP expansion shall be completed within three years of approval of this docket or the docket holder shall demonstrate to the Executive Director that it has

expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval. If the expansion has not been completed within three years of Docket Approval and the docket holder does not submit a cost analysis demonstrating substantial funds have been expended, Commission approval of the expansion to the existing WWTP shall expire. If this occurs the docket holder shall file a new application with the Commission and receive Commission approval prior to initiating construction of any modifications/expansions in the future.

l. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

m. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

n. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

o. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

p. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

q. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

r. The docket holder shall continue to provide emergency power and remote alarm controls at the existing/expanded WWTP. The docket holder shall certify in writing to the Commission that it has complied with this condition for the expanded WWTP upon completion of construction when notifying the Commission that it has met the requirements of DECISION Condition II.j. above.

s. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the

event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

t. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

u. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

v. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

w. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

x. Prior to the docket holder initiating any future substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Commission's *WQR*, an application must be submitted and approved by the Commission. Such an application shall be submitted prior to final design to ensure that the Commission can provide the docket holder with draft effluent limitations for SPW specific parameters as guidance for design as to not require duplication of work or cause a substantial expenditure of public funds without Commission approval. The docket holder is encouraged to contact the Commission staff during the planning stages to identify the potential effluent limitations required to meet the no measurable change parameters under SPW.

y. The docket holder shall submit Final Plans and Specifications for the expanded WWTP to the Commission's Executive Director for review and receive approval prior to the start of construction.

BY THE COMMISSION

DATE APPROVED: March 11, 2015

EXPIRATION DATE: November 30, 2021