STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
Curt Fransen, Director

June 4, 2013

Mr. Michael J. Lidgard
NPDES Permits Unit Manager
EPA Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Subject: Final 401 Certification for the City of New Meadows Wastewater Treatment Plant; NPDES Permit No. ID-002315-9

Dear Mr. Lidgard:

On May 20, 2013, EPA provided DEQ with a proposed final permit for the City of New Meadows WWTP and requested DEQ provide a final §401 certification of the permit pursuant to section 401 of the Clean Water Act. Upon review of the proposed final permit DEQ prepared and now submits the enclosed final §401 certification for the permit.

If you have questions or need further information please contact Lauri Monnot at (208) 373-0461 or by email at Lauri.Monnot@deq.idaho.gov.

Sincerely,

Pete Wagner
Regional Administrator
Boise Regional Office

Enclosure: DEQ Final 401 Certification for NPDES Permit No. ID-002315-9

C: Miranda Adams, DEQ 401 Program Coordinator
Lance Holloway, DEQ Boise Regional Water Quality Manager

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

June 4, 2013

NPDES Permit Number(s): ID-002315-9, City of New Meadows Wastewater Treatment Plant

Receiving Water Body: Little Salmon River

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The City of New Meadows Wastewater Treatment Plant discharges the following pollutants of concern: BOD_5, TSS, *E. coli* bacteria, pH, total phosphorus, temperature, chlorine and ammonia. Effluent limits have been developed for BOD_5, TSS, *E. coli* bacteria, pH, total phosphorus, temperature, and chlorine. No effluent limits are proposed for ammonia, but monitoring is required.

Receiving Water Body Level of Protection

The City of New Meadows Wastewater Treatment Plant discharges to the Little Salmon River within the assessment unit (AU) 17060210SL007_04 (Little Salmon River – 4th order). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply. Additionally, Idaho WQS provide that all waters of the state be protected for agricultural and industrial water supply, wildlife habitat and aesthetics.

The cold water aquatic life use in the Little Salmon River AU is not fully supported due to excess water temperature (2010 Integrated Report) and total phosphorus. DEQ's Integrated Report and Assessment Database (ADB) only show that the cold water aquatic life use is impaired by temperature; however, this AU was assessed in 2004 to complete the Little Salmon River TMDL (DEQ 2006), which determined that temperature and nutrients (phosphorus) were causing the impairment. The error in the database will be corrected in the next Integrated Report. Support status of the primary contact recreation beneficial use has not yet been assessed (2010 Integrated Report). Water bodies identified as unassessed are to be provided an appropriate level of protection on a case-by-case basis using information available at the time of a proposal for a reissued permit or license (Idaho Code §39-3603(2)(b)(ii)). *E. coli* samples were collected in 2004, the data was not collected at a proper frequency to calculate a true geometric mean comparable to Idaho WQS; however, the sample results ranged from 730 to 2,400 *E. coli* organisms per 100 mL of water, which is well over Idaho's criteria developed to protect human health and strongly suggests an impairment of the contact recreation beneficial use. This data was used to formulate a bacteria TMDL for the AU which was approved by EPA in 2006. Past and current land use in the watershed supports the expectation that bacteria monitoring, during the recreation season, would produce similar results. As such, DEQ will provide Tier 1 protection only for the aquatic life and recreation beneficial use (IDAPA 58.01.02.051.01).

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses. The effluent limitations and associated requirements contained in the City of New Meadows Wastewater Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL.

The EPA-approved *Little Salmon River TMDL* (DEQ 2006) establishes wasteload allocations for temperature, *E. coli* bacteria, and total phosphorus. These wasteload allocations are designed to ensure the Little Salmon River will achieve the water quality necessary to support its existing and designated aquatic life beneficial uses and comply with the applicable numeric and narrative criteria. The effluent limitations and associated requirements contained in the City of New Meadows Wastewater Treatment Plant permit are set at levels that are more stringent than the current permit and comply with these wasteload allocations (Table 1).

In sum, the effluent limitations and associated requirements contained in the City of New Meadows Wastewater Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Little Salmon River TMDL*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Little Salmon River in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone that utilizes 25% of the critical flow volumes of Little Salmon River for total residual chlorine and ammonia.

Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

Table 1. Comparison of current and proposed permit limits for pollutants of concern.

Pollutant	Units	Current Permit			Proposed Permit			Change[a]
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
Pollutants with limits in both the current and proposed permit								
Five-Day BOD	mg/L	30	45	—	30	45	—	NC
	lb/day	90	135	—	90	135	—	
	% removal	≥85%	—	—	≥85%	—	—	
TSS	mg/L	45	65	—	45	65	—	NC
	lb/day	135	195	—	135	195	—	
	% removal	≥65%	—	—	≥65%	—	—	
pH	standard units	6.5–9.0 all times			6.5–9.0 all times			NC
E. coli	no./100 mL	126		406	126		406	NC
Total Residual Chlorine (final)	mg/L	0.5	0.75	—	0.5	0.75	—	NC
	lb/day	1.5	2.3	—	1.5	2.25	—	
Pollutants with new limits in the proposed permit								
Total Phosphorus	lb/day (June 21–Sept 22)	—	—	Report	6.6	—	—	New, TMDL
Total Phosphorus	(September 23-June 20)	—	—	—	—	—	Report	
Temperature	°C	—	—	—	72	—	23	New, TMDL
Pollutants with no limits in both the current and proposed permit								
Total Ammonia	mg/L	—	—	Report	—	—	Report	NC

[a] NC = no change, New TMDL – new effluent limit.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Lauri Monnot, Boise Regional Office, (208) 373-0461, Lauri.Monnot@deq.idaho.gov.

Pete Wagner
Regional Administrator
Boise Regional Office