# ORIGINAL



North American Hydro Holdings, Inc.

116 State Street, P.O. Box 167, Neshkoro, WI 54960 USA
Tel 920-293-4628 Fax 920-293-8087 Email nah@nahydro.com Web www.nahydro.com

May 21, 2009

Ms. Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426 SECRETARY OF THE REGULATION OF THE PERSON BELLEVILLE

RE: Addendum (May 2009) to the Water Quality Monitoring Plan
Per License Article 405 for the Oconto Falls (Upper) Hydroelectric Project –
FERC Project #2523 N.E.W. Hydro

Dear Ms. Bose:

Enclosed is 1 original and 8 copies of the Addendum (May 2009) to the Water Quality Monitoring Plan Per License Article 405 for the Oconto Falls (Upper) Hydroelectric Project – FERC Project #2523, N.E.W. Hydro.

The Addendum identifies the monitoring equipment that will be used, report formats furnished with written submissions to agencies and the designated contact person for each agency involved. Monitoring will begin on July 1, 2009 and continue through September 30, 2009 for the monitoring year.

If you have any questions concerning the report, please contact Mr. Gary Rast at the North American Hydro offices @ 920-293-4628, ext 15. He can also be reached by e-mail at <a href="mailto:gary.rast@nahydro.com">gary.rast@nahydro.com</a>.

Sincerely,

North American Hydro Holdings

Agent for Licensee

Charles Alsberg



Article 405 - Oconto Falls (Upper) Hydroelectric Project FERC Project

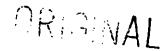
#2523

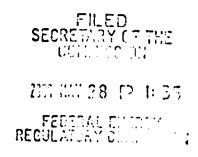
Cc: Mr. Jim Reyburn - WDNR

Mr. Nick Utrup - USFWS

Ms. Peggy Harding - FERC Chicago Regional Office

Corporate Office - NAHH





### **ADDENDUM**

(May 2009)

to the

## Water Quality Monitoring Plan

Per License Article 405

for the

# Oconto Falls (Upper) Hydroelectric Project FERC Project #2523 N.E.W. Hydro

Oconto River, Oconto County, Wisconsin

Submitted By:
North American Hydro
116 North State Street
P.O. Box 167
Neshkoro, WI 54960

May 2009

#### Introduction

This Water Quality Monitoring Plan for the Oconto Falls (Upper) Hydroelectric Project, FERC Project # 2523, City of Oconto Falls, Oconto County, Wisconsin has been written in generic terms in order to encompass technological advancements and potential agency personnel changes during the 30-year term of license. Therefore, current equipment manufacturers, equipment model specifications and reference to specific Wisconsin Department of Natural Resources (WDNR), United States Department of the Interior - Fish and Wildlife Service (USFWS) and Federal Energy Regulatory Commission (FERC) agency personnel have purposely been excluded from this plan.

Prior to the execution of a Water Quality Study, the licensee will refine the Water Quality Monitoring Plan in consultation with the WDNR and the USFWS. The plan refinement will specify the sampling equipment to be used during the study period and the specific agency personnel to whom data and report submissions will be sent. It will be submitted in the form of an addendum to the Water Quality Monitoring Plan and will be sent to all designated agency personnel on or before May 31 of the sampling year in order to provide timely notice of the sampling event and reporting requirements.

# Water Quality Monitoring Plan Per License Article 405

for the

Oconto Falls (Upper) Hydroelectric Project FERC Project # 2523
N.E.W. Hydro, Inc.

Oconto River, Oconto County, Wisconsin

#### Requirements for Studies and History

The Federal Energy Regulatory Commission (FERC), has stipulated as a requirement of the Oconto Falls (Upper) Hydroelectric Project License (Article 405), issued November 20, 1997, that a Water Quality Study shall be performed beginning five (5) years after license issuance and once every five (5) years thereafter for the term of the license. Article 405 also required that a monitoring plan should be filed with the Commission within one (1) year of license issuance.

On March 19, 1998 the Wisconsin Department of Natural Resources, in a letter to North American Hydro, Inc. commenting on the proposed Water Quality Monitoring Plan for the Oconto Falls (Lower) Hydroelectric Project (FERC Project No. 2689), recommended coordination for concurrent water quality studies with the Oconto Falls (Upper) Hydroelectric Project, located approximately 2000 feet upstream.

On May 18, 1998 the FERC granted a request by N.E.W. Hydro, Inc., submitted on March 25, 1998, for a one-year extension of all license article stipulated deadlines, extending the deadline for plan submission to November 19, 1999.

On November 19, 1998 the FERC approved the Water Quality Monitoring Plan for the Oconto Falls (Lower) Hydroelectric Project to commence in 1999 and once every five (5) years thereafter for the 30-year term of the license. The FERC additionally commented that the licensee may propose to begin water quality monitoring at the Oconto Falls (Upper) Hydroelectric Project in the year 2004 in order to run concurrently with the Oconto Falls (Lower) Hydroelectric Project water quality studies.

It is the intent of this plan to initiate water quality monitoring in the year 2004 and once every five (5) years thereafter for the term of the current license in order to execute water quality studies concurrently with the Oconto Falls (Lower) Hydroelectric Project Water Quality Monitoring Plan timeline.

#### Purpose of Studies

Article 405 of the license states that "The purpose of this monitoring plan is to ensure that releases from the Oconto Falls Project maintain the following state standards, except when natural conditions prohibit attainment of the standards: (1.) the DO shall not be lowered to less than 5 milligrams per liter at any time; (2.) the temperature shall not exceed 89° Fahrenheit at any time; and (3.) the pH shall be within the range of 6.0 and 9.0".

#### Study Sampling Periods

Study sampling will be conducted July 1, 2004 through September 30, 2004 and every 5th year interval thereafter for the term of the license. Study sampling will coincide with sampling at the Oconto Falls (Lower) Hydroelectric Project (FERC Project #2689). The July through September sampling period represents the typical annual period of minimum dissolved oxygen levels in the Oconto River resulting from a combination of high ambient temperature, low river flow, and aerobic oxygen consumptive processes.

**Equipment Assignment** 

The following equipment has been acquired and is scheduled to be used for the July 1 thru September 30, 2009 water quality study at the Oconto Falls (Lower) Hydroelectric Project – FERC Project #2689.

Reservoir: Hach HQ40d series portable meter with a detachable cable and

probe with 1 meter markers on the cable. The probe contains both Dissolved Oxygen and Temperature sensors. This equipment will be used to obtain weekly surface to bottom 1 – meter profile data in the reservoir. The meter was calibrated in late March 2009 and retains calibration for 1 year per Hach/Hydrolab specifications.

Tailrace: Hach/Hydrolab MS5 Mini Sonde with the capability to measure and

record Dissolved Oxygen, Temperature, Conductivity, and pH as well as Date, Time, and Battery Voltage. The Hach/Hydrolab Mini Sonde will obtain and store continuous 30 – minute interval Tailrace sample data during the study. The sonde will be checked over, cleaned, batteries changed as needed, and data downloaded every 2 weeks. The unit will be calibrated at least monthly for pH and Conductivity and approximately every 8 weeks for Dissolved Oxygen. The calibration guidelines were obtained

from Hach/Hydrolab company representatives. The equipment was

inspected and factory calibrated in May 2009.

#### **Report Formats**

In addition to the printed reports, data will be furnished on a CD in Microsoft Excel and Microsoft Word formats.

20090601-0094 FERC PDF (Unofficial) 05/28/2009

#### **Agency Contact Personnel**

All Water Quality Study correspondence, reports, and any notifications will be directed to the following agency personnel:

#### U.S. Fish and Wildlife Service

Mr. Nick Utrup
Wisconsin Hydropower Coordinator
U.S. Fish and Wildlife Service
Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229

E-Mail: Nick Utrup@fws.gov Direct Phone: 1-920-866-1736 Office Phone: 1-920-866-1717

Mobil: 1-920-530-9937 Fax: 1-920-866-1710

#### Wisconsin Department of Natural Resources

Mr. Jim Reyburn Water Quality Biologist Wisconsin Department of Natural Resources 2984 Shawano Avenue Green Bay, WI 54307

E-Mail: james.reyburn@wisconsin.gov

Direct Phone: 1-920-662-5465 Office Phone: 1-920-662-5100

#### Federal Energy Regulatory Commission

Ms. Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Ms. Peggy Harding, P.E. Regional Manager Federal Energy Regulatory Commission - Chicago Regional Office 230 South Dearborn Street, Suite 3130 Chicago, IL 60604



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Tel 920-293-4828 Fax 920-293-8087 Email nah@nahydro.com Web www.nahydro.com

May 21, 2009

Mr. Nick Utrup
Wisconsin Hydropower Coordinator
U.S. Fish and Wildlife Service
Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229

RE: Addendum (May 2009) to the Water Quality Monitoring Plan
Per License Article 405 for the Oconto Falls (Upper) Hydroelectric Project –
FERC Project #2523 N.E.W. Hydro

Dear Mr. Utrup:

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If you have any questions concerning the report, please contact Mr. Gary Rast at the North American Hydro offices @ 920-293-4628, ext 15. He can also be reached by email at gary.rast@nahydro.com.

Sincerely,

North American Hydro Holdings

Agent for Licensee

Charles Alsberg



Article 405 - Oconto Falls (Upper) Hydroelectric Project FERC Project

#2523

Cc: Mr. Jim Reyburn - WDNR

Ms. Kimberly D. Bose - FERC

Ms. Peggy Harding - FERC Chicago Regional Office

Corporate Office - NAHH



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Tel 920-293-4626 Fax 920-293-6067 Email nah@nehydro.com Web www.nahydro.com

May 21, 2009

Ms. Peggy Harding, P.E. Regional Manager Federal Energy Regulatory Commission - Chicago Regional Office 230 South Dearborn Street, Suite 3130 Chicago, IL 60604

RE: Addendum (May 2009) to the Water Quality Monitoring Plan
Per License Article 405 for the Oconto Falls (Upper) Hydroelectric Project –
FERC Project #2523 N.E.W. Hydro

Dear Ms. Harding:

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