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FEDERAL ENERGY  
REGULATORY  
COMMISSION

we energies

231 W. Michigan Street  
Milwaukee, WI 53203  
www.we-energies.com



ORIGINAL

May 20, 2003

Ms. Magalie R. Salas, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

RE: Way Dam Hydroelectric Project and Michigamme Reservoir- FERC No. 1759-006-066  
Hemlock Falls Hydroelectric Project - FERC No. 2074-007-028  
Peavy Falls Hydroelectric Project - FERC No. 11830-000-017  
Lower Paint Hydroelectric Project - FERC No. 2072-008-027  
Michigamme Falls Hydroelectric Project - FERC No. 2073-008-034  
Twin Falls Hydroelectric Project - FERC No. 11831-000-022  
Kingsford Hydroelectric Project - FERC No. 2131-020-046  
Big Quinnesec Falls Hydroelectric Project- FERC No. 1980-009-036

Articles 407 ( Project Nos. 2072, 11830 ); 408 ( Project Nos. 2073, 2074, 2131, 11831 ); and 409 ( Project Nos. 1759, 1980 ) - Water Quality Monitoring Plan Modifications

Wisconsin Electric (WE) doing business as We-Energies, is hereby filing one original and eight additional copies of recently approved modifications to the Water Quality Monitoring Plan ( the Plan ) for the subject projects. The initial Plan was filed with FERC in correspondence dated April 11, 2000 and the Plan's monitoring requirements, as specified by MDEQ, the 401 permitting authority for these projects, were subsequently adopted by FERC as Articles 407, 408, and 409 for the subject projects as specified above.

The results of continuous water quality monitoring for the above identified Projects performed during 2001 and 2002 indicated that only three of the eight projects exhibited problems in meeting the Dissolved Oxygen standard. The remaining projects as well as the temperature-only monitoring stations exhibited no problems in meeting the DO or temperature standards. Accordingly, WE approached the MDEQ with a proposal to modify the continuous monitoring and vertical profile measurement portions of the initial Plan. MDEQ has subsequently reviewed and approved WE's suggested modifications. A copy of the revised Plan is attached as Exhibit A. An outline of the modified Plan that was approved by MDEQ, is enclosed as Exhibit B to this filing. WE's request for comments and the MDEQ's response to this request are included as Exhibit C to this filing. We anticipate that the modified plan will guide water quality-related monitoring work over the next four years of the license period for the subject projects.

If you have any questions regarding this action, you may contact me at 906-779-2547

Sincerely,

*William Rauscher* *WR*

Mr. William R. Rauscher, Manager  
Hydroelectric Operations Division

Attachments

cc: Mr. Thomas Meronek, WDNR  
Ms Jessica Mistak, MDNR  
Mr. John Suppnick, MDEQ  
Mr. Gerald Saalfeld, MDEQ

## Certificate of Service

I hereby certify that I have this day served the foregoing document upon all entities specified in the order to issue license to be consulted on matters related to the Commission filing. Service was done pursuant to Rule 2010 of FERC's Rules of Practice and Procedure 18 CFR, Section 385.2010

Dated this day Tuesday, May 20, 2003



Annie Salmona  
Hydro Licensing  
We Energies

Annie Salmona  
We Energies  
333 W. Everett Street  
Milwaukee, WI 53203  
(414) 221-4151

**EXHIBIT A**

**FINAL WATER QUALITY  
MONITORING PLAN**  
For Projects referred to  
in the Wilderness Shores Settlement Agreement  
"WSSA"

Way Dam and Michigamme Reservoir	FERC Project No.	1759
Hemlock Falls Plant	"	2074
Lower Paint Plant, Dam and Diversion Canal	"	2072
Peavy Falls Plant and Peavy Pond	"	11830
Michigamme Falls Plant	"	2073
Twin Falls Plant	"	11831
Kingsford Plant	"	2131
Big Quinnesec Falls Plant	"	1980

Wisconsin Electric Power Company  
~~April 10, 2000~~  
May 20, 2003

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Preface

The initial Water Quality Monitoring Plan ( the Plan filed with FERC in April, 2000 ) specified two years of continuous monitoring for Temperature (T) and / or Dissolved Oxygen (DO) at up to 9-locations within the Michigamme / Menominee River basin. This monitoring work was completed in 2002. No compliance problems were encountered at any of the T-only monitoring locations and as a result, the Company requested that monitoring work at these locations be discontinued. Problems in meeting the DO standard were encountered at three projects, but not at the remaining ones . Continuous monitoring for T and DO is being continued at the three projects per agreement with the MDEQ. These projects are specified in the revised Plan.

Similarly, vertical profile measurement work has been reduced in the revised Plan; these measurements will now only be made in the flowages of the three projects where continuous monitoring for T, DO will occur.

No other changes to the Plan are contemplated until DO problems are resolved at the three project. A long term monitoring plan for all projects covered by the WSSA will be prepared in early 2006.

**I. Continuous Water Quality Monitoring**

**A. Temperature**

As stated in the Wilderness Shores Settlement Agreement, the company shall not discharge water from the subject projects that exceeds the following monthly maximum temperatures ( in degrees F, ) when flows are greater than or equal to the 95 percent exceedance values:

J	F	M	A	M	J	J	A	S	O	N	D
38	38	41	56	70	80	83	81	74	64	49	39

To determine compliance, continuous monitoring for temperature shall occur at two nine locations:

~~Upstream of the Michigamme Reservoir on the Michigamme River; downstream of Hemlock Falls Dam; downstream of Paint Diversion Dam in the diversion canal; downstream of Peavy Falls Dam; and downstream of Michigamme Falls Dam but above the confluence of the Michigamme and Brule Rivers; downstream of this confluence; downstream of the Twin Falls Dam; downstream of the Kingsford Dam; and downstream of the Big Quinnesec Dam.~~

Continuous recording instruments will be used with actual measurements being programmed to occur on the hour (24 measurements per day, per location).

**B. Dissolved Oxygen (DO)**

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As stated in the WSSA, the Company shall not cause the dissolved oxygen ( DO ) concentration measured in the Michigamme, Paint, and Menominee Rivers immediately downstream of the subject projects to be less than 5.0 mg/l. To determine compliance with this standard, continuous monitoring for DO and percent oxygen saturation shall occur at three six locations where compliance with the DO standard has not been attained, based on the initial two years of continuous monitoring: Within the Way Dam powerhouse; downstream of but within the tailraces of the Peavy Falls, and Michigamme Falls, ~~Twin Falls, Kingsford and Big Quinnesee~~ powerhouses. Monitoring conducted in the Michigamme River between the Way and Hemlock dams during July, 1997 demonstrated that little variation in DO either with depth or downstream distance occurs in the deep run river segment between these two dams, thus it is unnecessary to monitor downstream of either as long as the DO levels in the water being released by Way Dam is known. Maintenance of the standard for DO below Way dam will guarantee maintenance of the DO standard below Hemlock Dam.

With the exception of the instrument installed within the Way Dam powerhouse, all remaining instruments to be used will be portable, pre-programmed continuous recording instruments ( eg, such as the Hydro Lab Recorder ) that will take DO measurements on the hour ( 24 measurements per day, per location).

The Schneider Model WQ100 instrument, that has been plumbed into the turbine bearing cooling line within the Way Dam powerhouse, will likewise be programmed to measure DO each hour during the period May through September. This instrument draws water from the cooling line, which in turn, draws water from the intake forebay. The intake forebay supplies water to the turbine which is then discharged to the plant's tailrace. The intake forebay is situated at a depth that is often below the summer thermocline. The water at these depths, following periods of low inflow to the reservoir and warm ambient air temperatures, often exhibits DO levels below the DO standard. Monitoring performed by Wisconsin Electric in 1995-96 established the relationship between low DO levels in the reservoir below the thermocline and subsequent low DO levels in the tailrace.

### C. Quality Assurance

The instrument's probes will be cleaned and calibrated at least once every two weeks, water quality and bio-fouling conditions permitting. If extensive fouling precludes servicing the meters on this schedule, meters will be changed out on a more frequent basis. Before deployment, the DO probe's measurements will be air calibrated per the manufacturer's specifications while temperature will be checked against a laboratory thermometer certified by NIST. Upon retrieval, all hourly measurements will be scanned for possible violations of the water quality standards as

the data are being downloaded from the instruments to the laptop computer. At the end of the downloading process, the instruments' calibration is rechecked per the manufacturer's specifications. The company will seek to achieve an ending calibration error of no more than  $\pm 1.0$  mg/l 70% of the time.

D. Monitoring Schedule

Monitoring shall be initiated, water conditions permitting, as close to July June 1 as possible and shall continue through September 30. The continuous monitoring portion of this program shall continue at the above -specified locations until all facilities are in compliance with the DO standard. ~~be conducted during the first two years following license issuance. If no violations of the water quality standards for temperature or DO are encountered during the first two years, the agencies shall be consulted to determine an alternative monitoring protocol for the remaining years of the license.~~

~~However, if violations of the water quality standards are encountered during the initial two year portion of the program, the MDEQ agencies shall be consulted to devise a strategy for identifying the cause of the violations and to identify the actions needed to correct the problem. Continuous monitoring at any project may be initiated earlier than June 1 or extended into October if vertical profile measurements indicate the presence of below standard DO levels within the water column in the vicinity of intake structure openings for any of the projects.~~

II. Impoundment Monitoring

A. Locations / Schedule

Surface to bottom vertical profiles of temperature and DO shall be made in the one deepest location closest to each of the three project's intake, every two weeks from July June 1 through September 30 August 31 and ~~once monthly for the months of February, April, May, September and October.~~ Measurements shall be made at 1.0 meter increments until water temperature is found to change more than 1.0 degrees Centigrade (C) per meter, then sampling shall be done at 0.5 meter increments. Secchi disk water transparency measurements shall be made concurrent with the vertical profile measurements, ~~although ice cover and daylight conditions may effect true water column clarity during ice cover surveys.~~ When secchi disk measurements are taken, time of day, weather conditions ( including cloud cover ), and wave conditions will be recorded on the field data sheets.

B. Equipment / Quality Assurance

A Hydrolab surveyor or equivalent water quality analyzer will be used for the measurements. Instrument calibration shall be consistent with procedures used for the continuous monitoring equipment ( see Section I.C).

**III. Chemical Monitoring**

Water, sediment, and fish shall be monitored as prescribed in Appendix A to this document.

**IV. Reporting**

The company will compile and summarize all temperature and DO data in annual written reports provided to the Chief of the Surface Quality Division of the MDEQ and WDNR Northeast Region Water Leader. Reports shall be made immediately anytime water quality violations are found. At all other times, water quality data will be provided to the Chief of the Surface Water Quality Division of the MDEQ, and the WDNR Northeast Region Water Leader within five (5) working days of the request. For profile sampling, the results of all measurements shall be submitted including any replicate measurements. For each continuous monitoring locations, the following will be provided:

- Determinations of the daily minimum, daily maximum and daily average DO and temperature each day monitored. All raw data will be provided. An accounting shall be made for the entire monitoring period. All data gaps shall be fully explained;
- An upstream/downstream comparison of the DO and temperature including the frequency and magnitude of any values that exceed or violate the standard at each station;
- An evaluation of the relationship between any observed temperature or DO violations and other environmental factors that were monitored such as the time of day, stream flow, and operating characteristics of upstream projects;
- All quality assurance data.



Wisconsin Electric  
Final Water Quality Monitoring Plan - For Projects referred to in the Wilderness Shores  
Settlement Agreement "WSSA" Appendix A.

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## Chemical Monitoring Plan

### 1. Monitoring Locations / Equipment

The quarterly water quality samples will be collected from eight locations<sup>1</sup>. Ten percent of quarterly (December, May, July, October) samples will be replicated.

Sediment samples will be obtained from 8-locations representing depositional areas in each impoundment. Two spatially composited fine-grained sediment samples will be collected at each location for analysis using the Great Lakes and Environmental Assessment Section (GLEAS) Procedure #64 (copy attached to this plan).

With respect to the fish contaminant portion of this monitoring plan, it is important that the contaminant data collected support the objectives of both states' fish consumption advisory programs. The MDEQ recommends that for the purpose of supporting the consumption advisories, the upper Menominee River watershed be divided into two reaches; the Michigamme River and the Menominee River. Individual fish data collected from the Michigamme Reservoir, Michigamme Falls Impoundment, Peavy Pond, and the Paint River Pond can therefore be pooled. Similarly, individual fish data from the Twin Falls, Kingsford, and Big Quinnesec Impoundments can be pooled.

The fish will be collected during early spring from the subject waters using trap nets or electrofishing equipment. Since the capture of walleye may be labor intensive, an alternate means may be used. The company would solicit creel specimens from fishermen. In return, the company will donate \$100 to the donor's preferred charity (301 (c) recognized) in the donor's name. Fish will be placed on ice until frozen. The fish fillets shall be sent to a contract laboratory for the required analyses. The MDEQ will be consulted prior to the initiation of the required analyses as to whether the MDEQ wishes portions of collected fish tissues for comparative analyses.

The fish collected from the Michigamme River waters (Table A-1) shall be analyzed for mercury only, while the fish collected from the Menominee River waters (Table A-2) shall be analyzed for mercury and the organic contaminants listed in Section 3 and Table A-3.

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<sup>1</sup> Upstream and downstream Michigamme Reservoir; downstream of Peavy, Michigamme Falls, Lower Paint, Twin Falls, Kingsford, Big Quinnesec dams.

## 2. Monitoring Schedule

The first - once every five year - quarterly water quality samples will be collected coincident with the first year of continuous water quality monitoring to take advantage of committed staff resources.

The first sediment samples will be collected during the 20th year of the new license period.

The first fish contaminant sampling will be staggered three years after the first two years of the continuous water quality monitoring program to reduce demands on staff and will be repeated every ten years of the license period.

## 3. Analyses to be Performed

Each water sample shall be analyzed using approved US EPA methods for the following parameters:

*Alkalinity, chlorophyll-a<sup>2</sup>, color, dissolved sulfates, pH, hardness, Secchi depth, specific conductivity, total ammonia, total dissolved solids, total nitrates, total nitrites, total nitrogen, total organic carbon, total phosphorus, total suspended solids.*

Each sediment sample shall be analyzed using US EPA methods for the following parameters:

*Oil and grease, percent volatile solids, total arsenic, total barium, total cadmium, total chromium, total copper, total lead, total manganese, total mercury, total nickel, total nitrogen, total organic carbon, total phosphorus, total selenium, total silver, total zinc, acid volatile sulfides<sup>3</sup>, and total PCB.*

Fish filets shall be analyzed using US EPA methods for mercury and the organic contaminants: *Dieldrin; DDE; DDD; DDT; PCBs (Arochlors 1242, 1248, 1254, 1260); toxaphene; Heptachor epoxide; and the chlordane congeners listed in Table A- 3.*

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<sup>2</sup> While the company will make reasonable efforts to analyze this parameter, we are aware that few area contract laboratories perform this analysis.

<sup>3</sup> EPA methods exist for acid soluble and acid insoluble sulfides. Non-EPA methods must be used for acid volatile sulfides.

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 Final Water Quality Monitoring Plan - For Projects referred to in the Wilderness Shores  
 Settlement Agreement "WSSA"

**Table A- 1 Species and Size Ranges of Fish from the Michigamme River Impoundments to be analyzed for mercury.**

Species	Quantity	Fish Length Range ( inches )	Type of Filet
Walleye	5	15" - 18.9 "	Skin on Filet
Walleye	5	19" +	Skin on Filet
Burbot	10	19" +	Skin off Filet
Northern Pike	10	22"+	Skin off Filet
White Sucker	10	12" +	Skin on Filet

**Table A-2. Species and size ranges of fish from the Menominee River Impoundments to be analyzed for Mercury and Organic Contaminants**

Species	Quantity	Fish Length Range ( inches )	Type of Filet
Walleye	5	15-18.9"	Skin on Filet
Walleye	5	19 +	Skin on Filet
Red Horse Sucker	10	12 +	Skin on Filet
White Sucker	10	12 +	Skin on Filet
Carp	10 ( if possible )	any length *	Skin off Filet

\*-Since carp are hard to collect in this reach, any carp collected should be retained.

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Table A-3. Mercury and organic contaminants to be assayed in fish collected from the (WSSA) Specified flowages, and related levels of quantification to be achieved by analytical laboratory.

Contaminant	Analytical Level of Quantification
Dieldrin	5 ug/kg
4,4'-DDE	3 ug/kg
4,4'-DDD	5 ug/kg
4,4'-DDT	5 ug/kg
Mercury	10 ug/kg
PCBs ( arochlors 1242, 1248, 1254, 1250 )	25 ug/kg
Heptachor epoxide	3 ug/kg
Oxychlordane	3 ug/kg
gamma-Chlordane	3 ug/kg
alpha-Chlordane	3 ug/kg
trans-Nonachlor	3 ug/kg
cis-Nonachlor	3 ug/kg

**EXHIBIT B**

## PROPOSED REVISIONS TO THE WATER QUALITY MONITORING PLAN FOR HYDROELECTRIC PROJECTS COVERED BY THE WSSA

### EXISTING PLAN ELEMENTS

#### Continuous Monitoring

The Plan requires continuous monitoring for temperature (T) and dissolved oxygen (DO) in the tailraces for Peavy, Michigamme Falls, Twin Falls, Kingsford, and Big Quinnesec Falls ( Big Q. ), while at Way Dam, the continuous monitor is plumbed into the plant's turbine cooling water line, which, in turn, extracts water from the plant's turbine intake chamber.

The Plan requires continuous monitoring for T at four locations: in the Michigamme River upstream of Michigamme Reservoir; in Lower Paint and Hemlock tailraces; at the Michigamme / Brule River confluence.

Continuous monitoring for both parameters occurs from June 1<sup>st</sup> through September 30<sup>th</sup>.

#### Vertical Profile Measurements

The Plan requires measurements upstream, in the deepest area of each flowage created by the WSSA projects. Measurements are made roughly every two weeks during the summer continuous monitoring period, and once monthly during the months of February, April, May, September, and October.

#### Water Chemistry

The Plan requires quarterly sampling ( May, July, October, December ) in the tailraces of all projects once every five years.

#### Sediment Chemistry

The Plan calls for sediment sampling and analyses during year 20 of the recently issued license period in each flowage.

#### Fish Contaminant

The Plan calls for fish contaminant sampling and analyses once every ten years starting in 2004

### RESULTS OF FIRST TWO YEARS OF COMPLIANCE MONITORING

#### Continuous Monitoring / Vertical Profile Measurements

##### Michigamme River

The results of the continuous monitoring for temperature at this location revealed no violations of the State's monthly average standard during 2001 or 2002. However, during August, 2001, the monthly average standard was exceeded for 15-hours on two days in August.

### Way Dam

Way Dam continues to exhibit low DO problems. However, this problem is being addressed through actions associated with Article 418 of this facility's new license.

The problem exists due to the fact that the intake opening for the turbine / water release structure lies below the thermocline / region of sub-standard DO levels in the upstream reservoir. The vertical profile measurements conducted during 2001, 2002 and in previous years confirm this finding.

### Hemlock

The results of the 2001, 2002 continuous monitoring program for temperature in this Plant's tailrace revealed no exceedances of the monthly standards; in addition, no daily exceedances of the monthly standards were observed. The flowage, due to its shallow nature, does not stratify significantly. No below standard DO levels have been detected in the water column upstream of the project during 2001 or 2002.

### Lower Point

The results of the 2001, 2002 continuous monitoring program for temperature in this Plant's tailrace revealed no exceedances of the monthly standards. However, in 2001, the monthly standard was exceeded for 4-hours in June and for 25 hours during the period August 6-9. In 2002, the July monthly standard was exceeded for a total of 8-hours on two separate days. The flowage, due to its shallow nature, does not stratify significantly. No below standard DO levels have been detected in the water column upstream of the project during 2001 or 2002.

### Peavy Falls

The results of the 2001, 2002 continuous monitoring program for temperature and DO in this Plant's tailrace revealed no exceedances of the monthly temperature standards. However, the Plant's discharges during July, August, and even September often failed to meet the 5.0 mg/l DO standard. The extent and duration of these failures have been provided to MDEQ staff in January, 2003.

The results of the vertical profile measurements revealed that the Peavy flowage does stratify rather intensely in the summer. The general depth of sub-standard DO levels ( no shallower than approximately 4.5 m based on 2001, 2002 measurements ) relative to the depth of the intake ( the intake extracts water from the 2-10 m portion of the water column ) indicates that there is great likelihood for low DO waters to be entrained at this project during the summer time.

### Michigamme Falls

The results of the 2001, 2002 continuous monitoring program for temperature and DO in this Plant's tailrace revealed no exceedances of the monthly temperature standards.

However, during 2001, the Plant's discharges during July, August, and even September often failed to meet the 5.0 mg/l DO standard. Usually, the periods of low DO releases coincided with periods of no or little flow from the plant ( off-peak hour non-generation ). The extent and duration of these failures had been provided to MDEQ staff in November, 2001. In November, 2001, and in agreement with terms specified by the WSSA, the Company changed out one of the Plant's two turbines to allow continuous release of water to this stretch of the Michigamme River. Continuous monitoring during

2002 demonstrated that this action corrected the previously identified low DO problem ( in 2002, a single hourly measurement was below 5.0mg/l vs. 296 in 2001 ).

Michigamme / Brule River Confluence

The results of the 2001, 2002 continuous monitoring program for temperature in this Plant's tailrace revealed no exceedances of the monthly standards. No exceedances of the monthly standards occurred during any day.

Twin Falls

The results of the 2001, 2002 continuous monitoring program for temperature and DO in this Plant's tailrace revealed no exceedances of the monthly temperature or daily DO standards.

The results of the vertical profile measurements revealed that the Twin Falls flowage does stratify. However, the general depth of sub-standard DO levels ( no shallower than approximately 9 m based on 2001, 2002 measurements ) relative to the depth of the intake ( the intake extracts water across the 0-6m water column depth ) indicates little likelihood for low DO waters to be entrained at this project.

Kingsford

The results of the 2001, 2002 continuous monitoring program for temperature and DO in this Plant's tailrace revealed no exceedances of the monthly temperature or daily DO standards.

The results of the vertical profile measurements revealed that the Kingsford flowage does not stratify significantly. As such, the flowage, which is very riverine in nature, does not develop low DO regions in the water column. In fact, sub-standard DO levels were only detected on the bottom during one survey. Therefore, while the intake extracts water across the entire 10 m deep water column, there is little likelihood for low DO waters to be entrained at this project.

Big Quinnesec Falls

The results of the 2001, 2002 continuous monitoring program for temperature and DO in this Plant's tailrace revealed no exceedances of the monthly temperature or daily DO standards.

The results of the vertical profile measurements revealed that the Big. Q. flowage does stratify. However, the general depth of sub-standard DO levels ( no shallower than approximately 13 m based on 2001, 2002 measurements ) relative to the depth of the intake ( the intake extracts water from the 2.5 to 10 m depth level of the water column ) indicates little likelihood for low DO waters to be entrained at this project.

**PROPOSED CHANGES**

**The Company's Monitoring / Compliance Philosophy**

The Company operates the WSSA Projects in an integrated fashion. As part of this historic agreement, the Company made a commitment to minimize the effect of its operations on the aquatic resources with which these eight projects interact. This



commitment includes taking steps to assure that the river system containing these projects meet water quality standards. A monitoring plan was enacted to assess compliance with the states' of Wisconsin and Michigan water quality standards. While several problems have been identified at two projects, it is clear that the remaining projects pose no real risk to these water quality standards. For these remaining projects, the Company believes that it is unwise to commit finite financial resources to monitor for the sake of monitoring. In stead, the Company is willing to commit resources to correct / mitigate the problems that have been identified. In light of this philosophy, the Company believes that the current Water Quality Monitoring Plan should be modified as follows:

#### Continuous Monitoring / Vertical Profile Measurements

We propose eliminating all vertical profile measurements at projects where no additional continuous monitoring is currently proposed. These measurements have played an important role in identifying project flowages that might cause problems by virtue of the way these flowages thermally stratify during the summer and where within the water columns project intake structures extract water. With the exception of three projects ( Way Dam / Michigamme Reservoir, Peavy Falls, Michigamme Falls ), this work has essentially been completed. .

#### Michigamme River ( Upstream of Michigamme Reservoir )

We propose eliminating all monitoring work at this location. No need for continuing monitoring work has emerged after two years of effort.

#### Way Dam

Article 418 of the new license for this project requires resolution of the low DO problem at this location. As part of our on-going efforts to resolve this problem, the Company will continue to operate the continuous monitor for temperature and DO within the Plant. However, monitoring will focus on the period May through September. We will also conduct vertical profile measurements during 2003 and possibly during additional summers, pending the results of work conducted pursuant to Article 418.

#### Hemlock

We propose eliminating all monitoring work at this location. No need for continuing monitoring work has emerged after two years of effort. Besides, corrective measures taken at Way Dam, which is located a few miles upstream, will guarantee compliance with standards at Hemlock.

#### Lower Paint

We propose eliminating all monitoring work at this location at least until 2007. A final long-term monitoring plan for this facility will be created no later than March 31, 2006.

#### Peavy Falls

Low DO problems have been documented during both compliance monitoring seasons. While it appears that most of the periods of low DO in the tailrace occur during hours of non-generation, it is not clear what impact these releases have on the river segment connecting the tailrace with Michigamme Falls Flowage. Therefore, the Company believes that it is prudent to continue monitoring in this connecting water body during the period most likely to exhibit the problem ( July through the end of September ). This work will be conducted in 2003 and will continue in subsequent years pending the

resolution of the problem. Vertical profile measurements will likewise be taken during this period at least once every two weeks.

Michigamme Falls

While problems were identified during 2001 prior to implementing the changes in downstream flow, committed to in the WSSA, those problems appeared to be solved once the changes were implemented. Continuous monitoring will be conducted during the summer of 2003 ( July through the end of September ) to confirm 2002 findings. Vertical profile measurements will likewise be taken during this period at least once every two weeks.

Michigamme / Brule River Confluence

We propose eliminating all monitoring work at this location. No need for continuing monitoring work has emerged after two years of effort. Again, monitoring performed both at the Brule plant and at the Michigamme Falls Plant during 2002 show that non-compliance is highly unlikely at this point in the river system.

Twin Falls

We propose eliminating all monitoring work at this location at least until 2007. A final long-term monitoring plan for this facility will be created no later than March 31, 2006.

Kingsford

We propose eliminating all monitoring work at this location . at least until 2007. A final long-term monitoring plan for this facility will be created no later than March 31, 2006.

Big Quinnesec Falls

We propose eliminating all monitoring work at this location. at least until 2007. A final long-term monitoring plan for this facility will be created no later than March 31, 2006.

**Remaining Portions of the Existing Water Quality Monitoring Plan**

At this time, the Company is not proposing any changes to the remaining components of the Plan.

**EXHIBIT C**

**we** energies

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April 14, 2003

Mr. John Suppnick  
Michigan Dept. of Env. Quality  
Surface Water Quality Division  
300 S. Washington Square  
P.O. Box 30273  
Lansing, MI 48909

Proposed Revisions to the Water Quality Monitoring Plan for Hydroelectric Projects covered by the WSSA

Dear Mr. Suppnick:

As you know, We Energies has completed two years of compliance-required water quality monitoring at the hydroelectric projects covered by the Wilderness Shores Settlement Agreement ( WSSA ). While problems have been identified at three projects, corrective measures have already been implemented at one of the projects ( Michigamme Falls ) and plans for correcting problems at a second project ( Way Dam ) have been filed with FERC as required by the new license for that facility. The existing Water Quality Monitoring Plan for all eight of the projects covered by the WSSA contain a clause allowing the Company to request changes in the WQ monitoring plan following two initial years of compliance monitoring if no problems are encountered at individual plants / river segments. The attached summary document summarizes the initial monitoring results and proposes modifications to the WQ monitoring plan that would take effect during 2003.

In light of the fact that we need to soon finalize staff resource allocations for work this coming summer, I would greatly appreciate your review of and concurrence with these proposed modifications by May 15, 2003.

I am available at 414-221-2187 to discuss any questions / concerns you may have regarding this proposal.

Sincerely,

A handwritten signature in cursive script that reads 'David T. Michaud'.

David T. Michaud  
Principal Environmental Scientist

cc: William Rauscher  
Scott Cevigney  
John Hrobar



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



STEVEN E. CHESTER  
DIRECTOR

April 30, 2003

Mr. Dave Michaud  
WE Energies  
231 W. Michigan St.  
Milwaukee, Wisconsin 53203

Dear Mr. Michaud:

We have received your April 14, 2003 letter transmitting your proposal to modify the water quality monitoring plan for the projects covered under the Wilderness Shores Settlement Agreement.

The changes you propose are as follows:

Location	Change Proposed
Michigamme River upstream of Michigamme Reservoir	Eliminate continuous temperature and quarterly chemistry grab samples.
Downstream of Hemlock Falls Dam	Eliminate continuous temperature.
Downstream of Lower Paint	Eliminate continuous temperature and quarterly chemistry grab samples.*
Downstream of Brule/Michigamme River confluence	Eliminate continuous temperature.
Twin Falls Impoundment	Eliminate vertical profiles for dissolved oxygen (DO) and temperature.
Downstream of Twin Falls Dam	Eliminate continuous temperature and DO and quarterly chemistry grab samples.*
Kingsford Impoundment	Eliminate vertical profiles for temperature and DO.
Downstream of Kingsford Dam	Eliminate continuous temperature and DO and quarterly chemistry grab samples.*
Big Quinnesec Impoundment	Eliminate vertical profiles for temperature and DO.
Downstream of Big Quinnesec Dam	Eliminate continuous temperature and DO and quarterly chemistry grab samples.*


\*This monitoring will be discontinued through 2006 and a long-term monitoring plan for this facility will be proposed by March 31, 2006.

In addition, you propose to reduce the monitoring season at the continuous DO and temperature stations downstream of Peavy Dam and downstream of Michigamme Falls Dam from June through September to July through September.

Mr. Dave Michaud  
Page 2  
April 30, 2003

We agree with these changes because you are only eliminating monitoring at sites where no problems have been documented and you will continue monitoring at sites that have demonstrated problems (Way, Peavy, and Michigamme Falls Dams). Your plan should state, however that the Michigan Department of Environmental Quality will be consulted after the 2003 monitoring season regarding future monitoring downstream of the Michigamme Falls project and in the Michigamme Falls Impoundment.

If you have any questions about this letter, do not hesitate to contact us.

Sincerely,  


John Suppnick  
Surface Water Quality Assessment Section  
Water Division  
517-335-4192

js:yg  
cc: Ms. Jessica Mistak, Marquette Hatchery, Fisheries Division, MDNR  
Mr. Gerald Saalfeld/Section 401 File, Water Division, MDEQ