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EPA

Information Collection Request for the Great Lakes Water Quality Guidance

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1.0 SHORT CHARACTERIZATION

This Information Collection Request (ICR) calculates the burden and costs associated with the Great Lakes Water Quality Guidance (hereafter referred to as the Guidance). The Guidance identifies minimum water quality criteria, implementation procedures, and antidegradation provisions for the Great Lakes System. Implementation of these provisions is dependent upon future promulgation of provisions consistent with the final Guidance by State or Tribal agencies or, if necessary, EPA. Until actions are taken to promulgate and implement these provisions (or equally protective provisions consistent with the final Guidance), there will be no economic effect of this rule.

The Great Lakes System is comprised of eight States: New York, Pennsylvania, Ohio, Indiana, Illinois, Minnesota, Wisconsin, and Michigan. In the Great Lakes Basin, there are 588 major dischargers - 316 are major municipal dischargers, and 272 are major industrial dischargers; and 3,207 minor dischargers. In sum there are 3,795 dischargers (588 major, and 3,207 minor) that will be affected by State, Tribal, or EPA promulgated provisions consistent with the Guidance.

The Clean Water Act (CWA) authorized the Environmental Protection Agency (EPA) to issue permits for the discharge of pollutants or combinations of pollutants to the waters of the United States. EPA and authorized States regulate discharges to waters of the United States through NPDES programs. Such discharges include domestic wastewater, industrial wastewater, storm water as well as others. To protect human health, aquatic life, and wildlife in the Great Lakes System, Congress enacted, on November 16, 1990, the Great Lakes Critical Programs Act (CPA). Section 101 of the CPA amended Section 118 of the CWA and directed EPA to publish water quality guidance for the Great Lakes that:

- Conforms to the Great Lakes Water Quality Agreement;
- Is no less restrictive than the CWA and national water quality criteria and guidance;
- Specifies numerical limits on pollutants in ambient Great Lake waters that protect human health, aquatic life, and wildlife; and
- Provides guidance on minimum water quality standards, antidegradation policies, and implementation procedures for the Great Lakes System.

Within two years after the final guidance is published, the CPA requires the Great Lakes States to adopt water quality standards, antidegradation policies, and implementation procedures for waters within the Great Lakes System that are consistent with the guidance. If a Great Lakes State fails to adopt necessary standards, policies and procedures, EPA is required to promulgate them two years after the final guidance is published.

Based on the goals of the Great Lakes Water Quality Initiative (GLWQI), the Great Lakes Guidance will result in a new Part 132 of Title 40, Water Quality Guidance for the Great Lakes System. The Guidance includes:

- Minimum methodologies for setting numerical water quality criteria for all pollutants except for Table 5 pollutants to protect human health, wildlife, and aquatic life.
- A minimum antidegradation policy and procedures to maintain existing water quality.

- Minimum implementation procedures to translate the criteria and antidegradation policy into controls for specific sources of pollutants.

To conform with future requirements promulgated by Great Lakes States or Tribes consistent the final Guidance, NPDES permit applicants may have to submit additional information for future NPDES permit modification, renewal or issuance. Elements that may result in information collection or record keeping burden include the following:

- Permit applicants may be required to identify whether the 138 pollutants of initial focus are present in their discharges. At least one type of numerical Great Lakes water quality criteria have been determined for 30 of the 138 pollutants of initial focus.

- In cases where existing permits do not address pollutants for which numeric water quality criteria have been included in the final Guidance, permittees may be required to conduct additional monitoring where those pollutants are suspected to be present.

- At facilities with water quality-based effluent limits (WQBELs) that are established below the quantification level, as signified, e.g., by the most sensitive analytical methods specified in or approved under 40 CFR Part 136 for a given pollutant, permits will establish an actual limit exactly as calculated. However, any sample analyzed in accordance with the analytical method specified in the permit and other application procedures that is found to be below the quantification level shall be deemed in compliance with the WQBEL. In addition, these facilities are required to conduct pollutant minimization programs (PMPs) to review and monitor potential pollutant sources and implement control strategies. If the pollutant is a bioaccumulative chemical of concern (BCC), the permittee may also be required to conduct a bio-uptake monitoring program.

The final Guidance includes two methodologies for developing numeric water quality criteria to protect human health and aquatic life, and one methodology to protect wildlife. The Tier I approach is used when certain minimum data requirements are met. Under the Tier II approach, water quality values can be calculated based on fewer data than the full minimum data required for a Tier I calculation. The Tier II approach was designed to provide a methodology for evaluating pollutants and interpreting narrative water quality criteria when there is insufficient data to develop Tier I criteria. To reflect the increased uncertainty associated with fewer data points, criteria developed using the Tier II approach will generally be more stringent than criteria developed using the Tier I approach.

This ICR has estimated the burden and costs associated with implementation of the Guidance. The total annual burden to all respondents is estimated to be 128,901 hours with an associated cost of $4,580,281. The total annual burden to local governments, as publicly owned treatment works (POTW) operators, is estimated to be 45,296 hours with an associated cost of $2,008,624. The total annual burden to State and Federal governments is estimated to be 6,478 hours with an associated cost of $193,701, of which 5,886 hours of the burden and $175,992 fall upon the State governments.

2.0 NEED FOR AND USE OF THE COLLECTION

2.1 NEED AND AUTHORITY FOR THE COLLECTION

The primary objective of the CWA is "to restore and maintain the chemical, physical and biological integrity of the nation's waters" (Section 101(a)). CWA Section 402 establishes the NPDES program to regulate the discharge of any pollutant or combination of pollutants from point sources into the waters of the United States. CWA Section 402(a), as amended, authorizes the EPA Administrator to issue permits for the discharge of pollutants if those discharges meet the following requirements:

- All applicable requirements of CWA Sections 301, 302, 306, 307, 308, and 403; and
- Any conditions the Administrator determines are necessary to carry out the provisions and objectives of the CWA.

Section 101 of the CPA amends Section 118 of the CWA and directs EPA to publish water quality guidance for the Great Lakes System. Provisions of the Guidance are codified in 40 CFR Part 132. The Guidance establishes minimum water quality criteria, implementation procedures, and antidegradation provisions for the Great Lakes System.

EPA and delegated NPDES permitting authorities may need point source dischargers in the Great Lakes Basin to collect and submit information for the following reasons:

- To implement methodologies for setting numerical water quality criteria and values promulgated by States and Tribes for pollutants in the Great Lakes. The Great Lakes States will use the methodologies consistent with the final Guidance when revising existing or promulgating new water quality criteria.
- To evaluate requests for permit changes using antidegradation policies and procedures consistent with the final Guidance.
- To further the pollution prevention policy that focuses on the virtual elimination of toxic discharges into the Great Lakes System.
- To translate provisions consistent with the elements of the final Guidance into controls for point sources of pollutants.
- To identify the facilities that require additional permit conditions (i.e., those that are discharging pollutants at levels of concern into the Great Lakes System).
- To identify new pollutants in existing discharges.
- To evaluate water quality in the Great Lakes.
- To determine violations of State/Tribal provisions consistent with the Guidance.

2.2 USE AND USERS OF INFORMATION

Although the applicants collect and submit many types of information, this information can be broadly categorized as identification details (e.g., name, location, and facility description) and as information related to pollutant discharges into the Great Lakes.

2.2.1 IDENTIFICATION, LOCATION, AND DESCRIPTION OF FACILITY

Permitting authorities currently require dischargers to provide information such as the name, location, and description of facilities to identify the facilities that require permits. EPA and authorized NPDES States store much of this basic information in the Permit Compliance System (PCS) database. PCS provides EPA with a nationwide inventory of NPDES permit holders. EPA Headquarters uses the information contained in the PCS to develop reports on permit issuance, backlogs, and compliance rates. The Agency also uses the information to respond to public and Congressional inquiries, develop and guide its policies, formulate its budgets, assist States in acquiring authority for permitting programs, and manage its programs to ensure national consistency in permitting.

2.2.2 INFORMATION RELATED TO DISCHARGES INTO THE GREAT LAKES SYSTEM

NPDES permit applications and requests for supplemental information currently require information about wastewater treatment systems, pollutants, discharge rates and volumes, whole effluent toxicity testing and other data. Additional information collection requirements that may be necessary to implement State, Tribal, or EPA promulgated provisions consistent with the final Guidance include:

- Monitoring (pollutant-specific and whole effluent toxicity or WET);
- Pollutant minimization programs;
- Bioassays to support the development of water quality criteria;
- Antidegradation policy/demonstrations; and
- Regulatory relief options (e.g., variances from water quality criteria).

This information may be used to ensure compliance with provisions consistent with the Guidance and re-evaluate existing permit conditions and monitoring requirements. Data on discharges is entered into STORET and PCS, EPA's databases for ambient water quality data and NPDES permits, respectively. Results of water quality criteria testing will be entered into an EPA Information Clearinghouse database.

3.0 THE RESPONDENTS AND THE INFORMATION COLLECTED

3.1 CHARACTERIZATION OF RESPONDENTS

NPDES permits are required any time there is a point source discharge of pollutants to waters of the United States, regardless of the type of discharger. Consequently, all point source dischargers must apply for an NPDES permit. In addition, permits issued to point sources that discharge into the Great Lakes System will be required to include provisions, as applicable, implementing State/Tribal requirements consistent with the final Guidance. Based on a review of lists that States generated and of permits issued since March 1991, EPA determined that initially 588 major and 3,207 minor point sources would be affected (see Exhibit 3-1).

EPA distinguishes between major and minor point sources under the NPDES permitting program. EPA designates major municipal dischargers as those: serving at least 10,000 persons; having a design flow in excess of 1 million gallons per day; having significant amounts of toxics in

EXHIBIT 3-1

SUMMARY OF CATEGORY OF DISCHARGERS POTENTIALLY IMPACTED BY THE GREAT LAKES GUIDANCE

Discharger Category	Number of Dischargers
Major Dischargers	
Mining	14
Food	12
Pulp and Paper	54
Inorganic Chemical Man.	19
Org. Chemical Man./Petroleum Refining	28
Metal Manufacturing	37
Metal Finishing	31
Steam Electric	50
Miscellaneous	27
Municipal (POTWs)	316
Subtotal	588
Minor Dischargers	
Non-Municipal	2,280
Municipal	927
Subtotal	3,207
Total Dischargers	3,795

their effluent; discharging into waters of significant concern; or designated as such by the permitting authority. In characterizing major industrial dischargers, EPA considers several factors, including the concentration of toxic pollutants in the discharge as well as the volume discharged. Major sources in the Great Lakes System include 316 municipal (publicly owned treatment works or POTWs) and 272 industrial sources. Minor dischargers are all those permittees that are not designated as major dischargers. Minor sources may discharge contaminated process wastes that could have a significant toxic component, or have other characteristics addressed by the Guidance. EPA determined that there are 3,207 minor dischargers in the Great Lakes System. Of these, 927 sources were determined to be municipal dischargers and 2,280 non-municipal dischargers.

3.2 INFORMATION REQUESTED

Information collection associated with the implementation of the Guidance will ultimately affect the burden and costs of program elements estimated in other ICRs that have been developed under the NPDES program. This ICR will estimate the burdens and costs associated with information collection activities that may be over and above those burdens and costs already estimated in the other NPDES ICRs. These other ICRs include:

- *Information Collection Request for Application for the National Pollutant Discharge Elimination System Discharge Permit and the Sewage Sludge Management Permit*, Approved by OMB September 17, 1992 (*Applications ICR*);

- *Information Collection Request for the National Pollutant Discharge Elimination System: Discharge Monitoring Reports*, Approved by OMB September 30, 1991 (*Discharge Monitoring Report ICR*); and

- *Information Collection Request for the National Pollutant Discharge Elimination System Modification and Variance Requests*, Approved by OMB September 10, 1992 (*Modification and Variance ICR*).

Generally, States and Tribes must adopt provisions consistent with the final Guidance. In addition, EPA has included recommendations or guidance on other issues that permitting authorities may choose to incorporate into their water programs. This makes it difficult to determine burdens and cost associated with implementation of provisions consistent with the Guidance, however, EPA assumes that most States/Tribes will implement the recommendations provided in the Guidance. As such, EPA has included burden and costs associated with these recommendations throughout this ICR. Burdens and costs, therefore, may be overstated in some places.

Applications ICR

To collect information requested for the NPDES program, EPA has developed standard application forms for most applicants. Standard application forms include: Standard Form A; Short Form A; Forms 1, 2B, 2C, 2D, 2E, 2F; and the Uniform Federal Transportation/Utility System Application Form (See the *Applications ICR* for more detailed information).

For some permits and application requirements, EPA has not developed standard application forms. In some cases, standard forms are not appropriate; in others, EPA is currently developing appropriate forms. This ICR calculates the burden to respondents for supplying information addressing implementation of State, Tribal, or subsequently promulgated Federal provisions consistent

with the Guidance that may be in addition to existing application requirements of the authorized NPDES permitting program.

Respondent application information collection activities that may be associated with the implementation of the Guidance include:

- Bioassay tests to support the development of water quality criteria for the 138 pollutants of initial focus;
- Studies to identify and provide information on antidegradation control measures that will guard against the reduction of water quality in the Great Lakes System; and
- Whole effluent toxicity testing required to meet minimum data requirements to evaluate the need for WET limits.

Discharge Monitoring Report ICR

Discharge monitoring information collection relates to monitoring and reporting requirements included in NPDES permits issued to point source discharges of pollutants to surface waters of the United States. These requirements pertain to collection and analyses of samples and the reporting of summary information to the permitting authority. The permitting authority uses the data as the primary source of information to assess compliance with permit limitations. Data are also used for modifying or adding new permit requirements, assessing and/or developing effluent guidelines, and assessing the need for water quality-based limits in a permit.

Information collection requirements specified in the Guidance that will affect the overall burdens and costs estimated in the *Discharge Monitoring Report ICR* include monitoring, record keeping, and reporting requirements for:

- WQBEL compliance monitoring;
- WET limit compliance monitoring; and
- Pollutant Minimization Programs (PMPs).

Modification and Variance ICR

Section 301 of the CWA authorizes EPA and States with the authority to establish and modify NPDES permit conditions or to vary the effluent limitations established in NPDES permits. Section 405 of the Act allows States with sludge management authority to issue and modify permits that regulate the use and disposal of sewage sludge. The *Modification and Variance ICR* describes the data requirements necessary for a permitting authority to determine (1) whether NPDES or sewage sludge management permit conditions should be modified, or (2) whether a request for a variance from certain NPDES permit conditions should be granted.

Under the Guidance, several additional regulatory relief options are allowed if appropriate documentation is submitted to substantiate and justify them. In sum, relief options for dischargers to the Great Lakes include mechanisms such as variances from criteria, alternative mixing zones, phased-total maximum daily loadings (TMDLs), and site-specific criteria. All of these mechanisms are available under the CWA and existing NPDES programs. Therefore, this ICR includes information collection and record keeping activities associated with analyses and reporting to request

regulatory relief from Guidance requirements which are in excess of what would already be covered under the existing *Modification and Variance ICR.*

3.3 RESPONDENT ACTIVITIES

Respondents may be required to submit a variety of different information by State/Tribal or subsequent Federal requirements implementing the Guidance. This ICR explains these activities in detail for each Guidance provision that may result in respondent information collection or record keeping activities (see Section 6.1). In general, respondent activities will include the following:

- Preparing Basic Information - This includes reading instructions or reviewing regulatory application requirements, gathering general information, typing or filling out forms, drafting letters, reviewing applications or other materials, and mailing completed submissions.

- Generating Detailed Information - Detailed information may include data on production levels, data on effluent characteristics, pollutant minimization programs, financial estimates, engineering data, socio-economic data, or other information required by permitting authorities.

- Sampling and Analyzing Discharges - This may involve pollutant analyses, biological toxicity testing, predicting in-stream impacts, field monitoring, bioconcentration testing, or other scientific analyses.

- Maintaining Records - All NPDES permittees must keep records of the data used to complete their applications and to demonstrate their compliance for at least three years. First-time applicants may need to develop a record keeping system, enter data, train personnel, and file information. For existing facilities, record keeping entails collecting and filing raw data.

4.0 THE INFORMATION COLLECTED: GOVERNMENT ACTIVITIES, COLLECTION, METHODOLOGY, AND INFORMATION MANAGEMENT

4.1 GOVERNMENT ACTIVITIES

When permitting authorities receive NPDES permit applications, they must review them for completeness. (Note that all of the Great Lake States but no Great Lakes Indian Tribes have NPDES permitting authority.) If an application is incomplete, the authorities must notify the applicant and request the missing information. Completed applications must be assigned to permit writers, who then review the applications in more detail as they develop permit conditions. Permit authorities must also enter certain application data into PCS and STORET.

Additional information may also be requested by the permit writer to assist in developing discharge limits or other permit conditions. These data or special studies must be reviewed by the permit writer. This information may be submitted prior to issuance or during the term of the permit.

Specific Guidance program elements that may necessitate additional government review when promulgated by States/Tribes or EPA include:

- Bioassays to support the development of water quality criteria;
- Antidegradation demonstrations;
- Pollutant Minimization Programs (PMPs); and
- Requests for regulatory relief (e.g., variances).

In addition to activities associated with reviewing respondent applications, the State permitting authorities may experience other information collection and record keeping burdens associated with implementation of the Guidance. However, in accordance with OMB guidelines covering ICRs, State information collection and record keeping burdens not associated with respondent activities are not included in this ICR.

4.2 COLLECTION METHODOLOGY AND MANAGEMENT

Because each information collection activity associated with implementation of the Guidance will contain unique information, and because permittees submit applications only once every 5 years, improved information technology would not reduce respondent burden in a cost-effective manner.

EPA maintains some application data in the Agency's databases, PCS and STORET. This technology reduces the burden to EPA Headquarters for gathering and analyzing national permit and water quality data.

4.3 SMALL ENTITY FLEXIBILITY

For many reasons, EPA believes the information collection and reporting requirements described in this ICR do not place an unreasonable burden on small business. For example:

- In general, as the size of a facility increases, the amount of information required increases. Therefore, the burden of information collection is much less for small entities than for large entities.

- Facilities submit permit applications infrequently; typically, once every 5 years.

- Many small entities do not discharge any toxic pollutants, or they discharge pollutants to a sewage treatment plant. These small facilities may not be required to have NPDES permits, and thus will not experience an information collection burden associated with the Guidance.

Note however, some information collection and record keeping burdens associated with implementation of the Guidance cannot easily be reduced for small businesses. This is true for two reasons:

- NPDES permitting authorities need certain basic information from all permittees to make permitting decisions; and

- The CWA requires all point source dischargers to obtain NPDES permits, regardless of size. Therefore, all businesses that discharge directly into the waters of the Great Lakes System must submit necessary permitting information, including information to satisfy requirements ultimately adopted consistent with the final Guidance.

4.4 COLLECTION SCHEDULE

The Clean Water Act requires permittees to reapply for permits at least every 5 years, although permit writers may issue permits with a shorter duration. Most respondents submit applications every 5 years. When calculating burden, this ICR assumes that all permit applicants affected by the implementation of the Guidance follow this 5 year schedule.

Great Lakes States/Tribes must adopt monitoring and reporting provisions consistent with those specified in the Guidance. These will be determined on a case-by-case basis by the permitting authority and will be individually specified in NPDES permits. Generally, monitoring requirements will take effect upon issuance of the permit and will be in place throughout the life of the permit.

Information collection associated with regulatory relief requests based on State/Tribal or Federal provisions consistent with the Guidance will occur only when a permittee decides to seek such relief. EPA presumes that the few relief requests expected will continue to take place at time of permit reissuance.

5.0 NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

5.1 NONDUPLICATION

EPA has examined all the reporting requirements contained in the Clean Water Act and 40 CFR Parts 122, 123, 124, 125, 403, 501, and 503. The Agency also has consulted the following sources of information to determine if similar or duplicate information is available elsewhere:

- The EPA Information Systems Inventory;
- The EPA Inventory of Information Collection Requests;
- The Federal Information Locator System;
- The EPA Comprehensive Assessment Information Rule (53 *FR* 51698); and
- The EPA Toxics Release Inventory.

Examination of these databases revealed no duplicate requirements. Therefore, EPA has concluded that it has no other way to obtain the information addressed in this ICR.

5.2 CONSULTATIONS

The major provisions in the proposed Guidance were developed over a 2 year period by the eight Great Lakes States, the U.S. Fish and Wildlife Service, the U.S. National Park Service, EPA, and members of the public. On December 6, 1991, the Great Lakes States recommended that EPA publish the draft Guidance in the Federal Register for public review and comment. EPA generally used the draft ratified by the Steering Committee as the basis for preparing the proposed guidance published in the Federal Register on April 16, 1993 (58 FR 20802). However, EPA modified the package to reflect statutory and regulatory requirements and EPA policy considerations, to propose procedures for State and Tribal adoption of the final Guidance, to provide suitable discussion of various alternative options, to accommodate necessary format changes, and to respond to comments made by EPA's Science Advisory Board (SAB). Where modifications were made, the preamble to the proposal described both the modification and the original Steering Committee-approved guidelines, and invited public comment on both, All elements approved by the Steering Committee were either incorporated in the proposed Guidance or discussed in the preamble to the proposal. The 150-day public comment period on the proposal closed on September 13, 1993.

To evaluate the public comments and prepare the final guidance, the Office of Water created a Task Force to oversee 21 workgroups composed of EPA management and staff from Headquarters and Regions 2, 3, and 5, the Regions with Great Lakes States. To enhance intergovernmental partnership as part of Executive Order No. 12875 and to stay abreast of public expectations for the final Guidance, the Agency directed the Task Force to keep local, State and Tribal government officials, co-regulators, the regulated community and environmental interests informed. During the post-proposal process, the Task Force and workgroups participated in over 35 meetings with over 500 stakeholder representatives. The comments and issues raised by the stakeholders were incorporated into the docket and considered by the Agency in its option selection process and regulatory impact analysis for developing the final Guidance. The Fish and Wildlife Service's (FWS) comments resulted in formal interagency consultation on two issues regarding endangered species and culminated in a written Biological Opinion form FWS in 1994, which is in the docket.

These meetings kept EPA apprised of the most current scientific information and data to consider in developing the final Guidance. As a result, EPA provided notice of data availability and opportunity for public comment on August 30, 1994 (59 FR 44678). EPA received 23,000 pages of

comments, data, and information from over 5,700 commenters in response to these notices and from meetings with members of the public. In response, to the States' concerns, the final Guidance contains less detailed procedures for implementation, providing maximum flexibility for States and Tribes. EPA considered comments regarding the relative contribution of pollutants by non-permitted sources, discharges to polluted waters, maintaining present water quality, the mercury criteria, and mixing zones raised by the stakeholders.

5.3 EFFECTS OF LESS FREQUENT COLLECTION

Requirements consistent with the Guidance will be promulgated by the States or Tribes or, if necessary, by EPA, and then implemented through the water quality and permitting programs. Permitted facilities must reapply for NPDES permits before their existing permits expire, generally once every 5 years. The CWA prohibits issuance of NPDES permits with terms longer than 5 years. Less frequent permit applications would not provide the permitting authority with sufficiently current data to establish effective limitations or conditions when issuing permits. Less frequent permit issuance would also hinder the ability of EPA and the regulated community to take advantage of technological improvements as they occur.

The specific consequences of less frequent collection associated with monitoring and reporting requirements implementing the provisions in the Guidance are no different than the consequences for permittees not subject to the Guidance. A detailed discussion of these consequences are described in the *Discharge Monitoring Report ICR*. However, note that:

- Permits written based on infrequent monitoring data may not adequately represent peak release; and
- Reductions in monitoring frequency reduce the representation of discharge monitoring data relative to true waste discharge characteristics.

Since permittees will decide whether or not to apply for regulatory relief (e.g., variances from water quality criteria) from provisions implementing the Guidance, and generally pursuing relief is a one-time effort for the permittee, less frequent information collection associated with Guidance regulatory relief procedures is not relevant. Less frequent information collection would not provide the permitting authority and EPA Headquarters with sufficient information to meet their responsibilities for review and approval of regulatory relief under the under the CWA and Guidance.

5.4 GENERAL GUIDELINES

This information collection complies with the Paperwork Reduction Act guidelines (5 CFR §1320.6).

5.5 CONFIDENTIALITY AND SENSITIVE QUESTIONS

Permit applications may contain confidential business information. If this is the case, the respondent may request that such information be treated as confidential. All confidential data will be handled in accordance with 40 CFR §122.7, 40 CFR Part 2, and EPA's Security Manual Part III, Chapter 9, dated August 9, 1976. However, CWA Section 308(b) specifically states that effluent data may not be treated as confidential.

No questions of a sensitive nature are associated with this information collection.

6.0 ESTIMATING THE BURDEN AND COST OF THE COLLECTION

6.1 ESTIMATING RESPONDENT BURDEN

EPA has estimated the total respondent burden associated with implementation of provisions consistent with the Guidance to be approximately 128,900 hours annually (see Exhibit 6.1). Burden hours have been separated based on the following existing NPDES ICRs that would be modified by the new burden (see also Section 3.2):

- *Applications ICR*;
- *Discharge Monitoring Report ICR*; and
- *Modification and Variance ICR.*

EXHIBIT 6-1

SUMMARY OF RESPONDENT BURDEN

	Increase in Respondent Burden (Hours per Year)
Application Burden	72,330
Monitoring Burden	41,535
Regulatory Relief Options Burden	15,036
Total Burden	128,901

6.1.1 APPLICATIONS BURDEN

Respondent burden associated with NPDES permit applications was estimated to increase by approximately 72,330 hours annually. The types of activities for which burden were estimated include:

- Bioassays to support the development of water quality criteria for the 138 pollutants of initial focus;
- Studies to identify and provide information on antidegradation control measures that will guard against the reduction of water quality in the Great Lakes System; and
- Whole effluent toxicity testing required to meet minimum data requirements to evaluate the need for WET limits.

Burden Associated With Studies to Support the Development of Water Quality Criteria

Based on its experience, and the opinion of relevant EPA experts, EPA determined that bioassays, when necessary, to support the development of water quality criteria would, in almost all cases, be conducted by outside laboratories. The burden associated with such bioassays was calculated by dividing the total estimated cost ($1,188,097, see section 6.2.1) by the private sector hourly rate of $34.09, resulting in a burden of 34,852 hours. In addition, ten hours for directing the laboratory's work, or 760 hours of respondent burden, is anticipated to be associated with bioassays to support the development of water quality criteria.

States/Tribes must establish water quality-based effluent limits (WQBELS) necessary to protect water quality. The Guidance contains methodologies to calculate acute and chronic water quality criteria for the protection of aquatic life, water quality criteria for the protection of human health, and water quality criteria for the protection of wildlife. Tier I and Tier II methods are included in the final Guidance that differ primarily on the minimum data requirements. States/Tribes must adopt methodologies consistent with the final Guidance. They do not, however, have to develop wildlife values using the Tier II methodology. Tier I methods require more data and are therefore more precise and more expensive than Tier II methods. However, numerical values based on Tier II methods are likely to be more stringent than those based on Tier I methods to account for the greater uncertainty of the resulting values. For this ICR, EPA assumed that sources would request delay in the compliance deadlines in permits in order to generate sufficient data to calculate Tier I criteria, rather than Tier II values, in order to obtain less stringent WQBELS.

Further, EPA assumed that permittees would share information using the EPA Information Clearinghouse of water quality data to reduce costs. In effect, bioassays to support the development of water quality criteria will be conducted only once for each of the pollutants of initial focus for which this data is not readily available. Since criteria have already been developed for some of the pollutants of initial focus, bioassays to support the development of additional water quality criteria will be conducted for the remaining pollutants. Further, because permits are renewed every 5 years, EPA assumed that one-fifth of the criteria would be developed each year.

Antidegradation Policy Burden

The antidegradation provisions in the final Guidance applies to the discharge of non-deminimus levels of pollutants to high quality waters. However, the criteria for when an antidegradation demonstration must be performed are different for bioaccumulative chemicals of concern (BCCs) and non-BCCs. The purpose of the demonstration is to confirm that the permittee has evaluated options to reduce the extent of the need to lower water quality. In general, an antidegradation demonstration consists of first performing a pollution prevention alternatives analysis to identify prudent and feasible alternatives. If no pollution prevention alternatives are deemed prudent and feasible, then the permittee must identify alternative or enhanced treatment techniques. Finally, a permittee must demonstrate that the lowering of water quality is necessary to ensure social and economic development.

Based on compliance cost analyses performed for the Regulatory Impact Analysis, EPA expects that 5 percent of the 3,795 permittees (approximately 190) will discharge BCCs. EPA conservatively assumes that all of the permittees that discharge BCCs will request an increase in permit limits and be required to perform an antidegradation demonstration. Conservatively assuming that all of these permittees will prepare and submit an antidegradation demonstration in any given

year, and assuming that 60 hours is required to prepare the demonstration for BCCs, then the total respondent burden is estimated to be about 11,400 hours annually.

Based on past experience, EPA expects that another 5 percent of the permittees (approximately 190) are likely to request an increase in permit limits for non-BCCs. Conservatively assuming that all of these respondents will prepare and submit an antidegradation demonstration in any given year, and that 40 hours is required to prepare the demonstration for non-BCCs, the total respondent burden is estimated to be about 7,600 hours annually. Such estimates are based upon overconservative assumptions since all States are already required to have antidegradation requirements in their programs.

WET Data Collection Burden

A minimum of 1 year of quarterly acute or chronic WET testing using a fish and a macroinvertebrate (e.g., daphnia) was assumed necessary to evaluate the need for WET limits in a facility's permit. If the minimum data are not available, then the data would be collected during the first year of the permit term. Because this is a one-time data collection effort, it has been placed under the application information collection activities. Because WET testing requires specific expertise and equipment, EPA assumed it would be done by a contract laboratory. The burden associated with such testing was calculated by dividing the total estimated cost ($604,000, see section 6.2.2) by the private sector hourly rate of $34.09, resulting in a burden of 17,718 hours.

6.1.2 MONITORING BURDEN

Due to Guidance provisions addressing monitoring and reporting, respondent burden was estimated to increase by 41,535 hours annually. Guidance activities that may result in increased respondent burden include monitoring and reporting requirements for:

- WQBEL compliance monitoring;
- WET limit compliance monitoring;
- Pollutant Minimization Programs (PMPs) monitoring and reporting; and
- Bioconcentration studies for BCCs below analytical detection levels.

Since the Guidance does not establish specific record-keeping requirements, no additional burdens and costs are assumed for record keeping over those estimated in the *Discharge Monitoring Report ICR.*

Based on previous experience and interviews with program personnel, EPA determined that approximately 30 percent of Guidance-related monitoring associated with WQBELs and PMPs would be conducted by outside laboratories. Because monitoring for WET limits and performing bioconcentration studies require more sophisticated analyses, EPA assumed all WET monitoring and bioconcentration studies would be conducted by outside laboratories.

WQBEL Compliance Monitoring Burden

Based on the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date], and the methodology for determining burden developed in the *Discharge Monitoring Report ICR*, respondent burden associated with the Guidance compliance monitoring was estimated to be approximately 150 hours annually.

Respondent burden for monitoring was based on the pollutants that were determined most likely to need WQBELs based on implementation of methodologies consistent with the Guidance. Current sampling and monitoring frequencies for those Guidance pollutants of initial focus that have current permit limits or monitoring requirements were determined in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date]. Based on the potential for a facility's discharge to exceed a Guidance-based WQBEL, the variability of the flow, the treatment employed, and the types of pollutants, the need for more frequent monitoring was evaluated. In most cases, existing monitoring requirements in the permit were deemed adequate as State policy often dictated the frequency of monitoring used in a permit. Also, if additional parameters were added, the monitoring frequencies were established at a frequency similar to the existing monitoring requirements of other parameters.

The methodology for determining respondent monitoring burden is described in detail in the *Discharge Monitoring Report ICR*. Briefly, respondent burden for monitoring was defined to equal the sum of the time required to collect samples, time required to analyze pollutants, and the time required to prepare a report. Based on the methodology described in the *Discharge Monitoring Report ICR*, EPA determined that only the time required to analyze pollutants would increase as a result of WQBEL monitoring based on implementation of the Guidance. The *Discharge Monitoring Report ICR* estimated that one half hour would be required for each monitoring event (i.e., each pollutant) per year. Thus, the time required to analyze for pollutants is defined as:

Total Burden = Number of Pollutants * 0.5 hour

Based on the results from the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date], EPA estimated that an additional 176 facilities will require WQBEL monitoring for 306 pollutants as a result of implementation of State/Tribal or Federal provisions consistent with the Guidance (see Exhibit 6-2). This results in a monitoring burden of just over 150 hours each year.

EXHIBIT 6-2

SUMMARY OF ANNUAL RESPONDENT BURDEN FOR WQBEL COMPLIANCE MONITORING CONSISTENT WITH THE GUIDANCE

Discharger Category	Number of Pollutants*	Total Burden (Hours per Year)
Major Dischargers		
Food and Food Products	0	0
Inorganic Chemicals	12	6
Metal Finishing	7	3.5
Mining	7	3.5
Metals Manufacturing	64	32
Miscellaneous	8	4

EXHIBIT 6-2

SUMMARY OF ANNUAL RESPONDENT BURDEN FOR WQBEL COMPLIANCE MONITORING CONSISTENT WITH THE GUIDANCE

Discharger Category	Number of Pollutants*	Total Burden (Hours per Year)
Municipals (POTWs)	94	47
Organic Chemical Man./Petroleum Refining	15	7.5
Pulp and Paper	83	41.5
Steam Electric	16	8
Major Dischargers Subtotal	306.00	153
Minor Dischargers		
Municipals	0	0
Non-Municipals	0	0
Minor Dischargers Subtotal	0	0
Total	306	153

* Numbers represent total number of pollutants within an industrial category.

WET Limit Compliance Monitoring Burden

Similar to pollutant-specific WQBELs, if a WET limit is established for a facility, then periodic compliance monitoring would be required. Based on the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date], existing State WET limits and compliance monitoring requirements were deemed adequate for those facilities that required WET limits. Therefore, no additional Guidance burden was estimated related to implementation of the provisions for WET compliance monitoring.

Pollutant Minimization Programs (PMPs) Burden

After State/Tribal or Federal promulgation of provisions consistent with the Guidance, permittees are required to establish PMPs for pollutants for which WQBELs are below quantification levels. Total respondent burden associated with the establishment of PMPs was estimated to be 28,182 hours annually. Information collection activities associated with PMPs include:

- An annual review/semi-annual monitoring of potential sources of the pollutants;
- Quarterly influent monitoring and reporting;

- Development and submittal of a control strategy, including implementation of appropriate practicable control measures; and
- An annual status report.

Respondent burden associated with an annual review/semi-annual monitoring of potential sources, and quarterly influent monitoring and reporting was calculated based on:

- Numbers of potential sources of pollutants and number of pollutants with WQBELs set below the detection limit were identified during the development of costs for the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date]; and

- The *Discharge Monitoring Report ICR* methodology for determining time required for analyzing pollutants described above.

The respondent's time required to analyze for pollutants under PMPs was calculated using the following equation:

[(# Potential Sources of Pollutants * 2/yr) + (4/yr * # WQBELS Set Below MDL)] * 0.5

In sum, respondent burden associated with PMP monitoring is estimated to be about 4,031 hours annually (see Exhibit 6-3).

EXHIBIT 6-3

SUMMARY OF ANNUAL RESPONDENT BURDEN FOR IMPLEMENTING POLLUTANT MINIMIZATION PROGRAMS (PMPS)

Discharger Category	# of Potential Sources of Pollutants	# WQBELs Below Detection Levels	Total Estimated Burden
Major Dischargers			
Food and Food Products	0	0	0
Inorganic Chemicals	24	4	32
Metal Finishing	0	0	0
Mining	3	3	9
Metals Manufacturing	0	0	0
Miscellaneous	8	45	97.5
Municipals (POTWs)	2,579	549	3,677
Organic Chemicals Man./Petroleum Refining	15	30	75
Pulp and Paper	46	47	140.5

EXHIBIT 6-3

SUMMARY OF ANNUAL RESPONDENT BURDEN FOR IMPLEMENTING POLLUTANT MINIMIZATION PROGRAMS (PMPS)

Discharger Category	# of Potential Sources of Pollutants	# WQBELs Below Detection Levels	Total Estimated Burden
Steam Electric	0	0	0
Major Dischargers Subtotal	2,675	678	4,031
Minor Dischargers			
Municipals	0	0	0
Non-Municipals	0	0	0
Minor Dischargers Subtotal	0	0	0
Total	2,675	678	4,031

EPA determined that most permittees would use outside contractors to develop an approvable control strategy, and to prepare and submit annual status reports. To calculate burden associated with the strategy and the annual report, the cost estimates described in section 6.2.2 were divided by the private sector hourly rate, resulting in a burden of 19,995 hours for the approvable strategy and 4,156 hours for the annual report.

Bioconcentration Studies Burden

States and Tribes may, but are not required to, direct permittees to use fish monitoring and other bio-uptake studies to evaluate PMP performance where WQBELs are established below analytical detection limits. Such Studies would require sampling and laboratory analysis of fish tissue. Consistent with the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date], only analytical costs were estimated. Because the fish tissue testing requires special expertise, EPA assumes that it is very likely that permittees would contract with laboratories to conduct such studies. The burden associated with such studies was calculated by dividing the cost described in section 6.2.2 ($450,000) by the private sector hourly rate of $34.09 resulting in an annual burden of 13,200.

6.1.3 REGULATORY RELIEF OPTIONS BURDEN

Additional respondent burden associated with preparing requests for regulatory relief options available through the Guidance was estimated to be approximately 15,000 hours.

To be granted relief from provisions adopted consistent with the Guidance, it is assumed that the permittee will need to perform additional monitoring or special studies, etc., to support its request. Based on EPA's *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date], under the low-end cost estimate EPA conservatively estimates that regulatory relief would be requested for a total of 87 pollutants (from 59 facilities). EPA assumes that one-fifth (or about 18) will be requested each year. Permittee burden to prepare and submit a request for regulatory relief will vary depending upon the type of relief being pursued (e.g., criteria modification, alternative mixing zone, etc.). Based on a mid-range of costs to pursue regulatory relief provided by EPA Region and State contacts (see section 6.2.3) and using the private sector hourly rate, total respondent burden to prepare and submit variance requests is estimated to be about 15,036 hours annually.

6.2 ESTIMATING RESPONDENT COST

Respondent costs are the sum of labor costs and contractor costs. Total respondent costs associated with the information collection requirements of State/Tribal or Federal provisions consistent with the Guidance were estimated to be $4,580,281 annually (see Exhibit 6-4).

When calculating respondent costs, EPA makes the following assumptions:

- The average annual salary for federal and State employees is $38,869; this is equivalent to the salary of a GS-9, Step 10 federal employee. At 2,080 labor hours per year, the hourly rate is $18.69. Overhead cost for federal and State employees are expected to be 60 percent, or $11.21 per hour, yielding a total hourly rate of $29.90.

- The average annual salary in the private sector is 14 percent higher than the federal and State salary, creating an average annual salary of $44,311 and an hourly rate of $21.30. Overhead costs for the private sector are assumed to be 60 percent, or $12.79 per hour, yielding a total hourly cost of $34.09.

- The average annual salary of a POTW employee is equivalent to that of a GS-7, Step 1 federal employee. The annual salary of this worker is $24,441; the hourly rate is $11.75. Overhead costs add an additional 60 percent to these costs. Thus, the average cost of a POTW worker is $39,106 per year, or $18.80 per hour.

Respondent costs estimated in this ICR are those associated with the Guidance and are over and above the respondent costs estimated in the following ICRs which deal with similar costs and burdens for the NPDES permitting program:

- *Applications ICR*;
- *Discharge Monitoring Report ICR*; and
- *Modification and Variance ICR.*

EXHIBIT 6-4 SUMMARY OF RESPONDENT COST	
	Annual Respondent Cost
Applications Cost	$2,342,975
Monitoring Cost	$1,724,756
Modification and Variance Cost	$512,568
Total Respondent Cost	$4,580,281

6.2.1 APPLICATIONS COST

Due to implementation of the Guidance requirements, respondent costs associated with NPDES permit applications were estimated to increase by approximately $2,342,975 annually. Respondent application costs are associated with:

- Bioassays to support the development of water quality criteria for the 138 pollutants of initial focus;
- Studies to identify and provide information on antidegradation control measures that will guard against the reduction of water quality in the Great Lakes System; and
- Whole effluent toxicity testing performed to meet minimum data requirements to evaluate the need for WET limits.

Costs Associated With Studies to Support the Development of Water Quality Criteria

Annual respondent costs associated with developing Tier I numerical criteria based on water quality tests were estimated to be approximately $1,188,097 (see Exhibit 6-5 and oversight costs below).

Based on experience and the opinion of relevant EPA experts, EPA determined that bioassays to support the development of water quality criteria would, in almost all cases, be conducted by outside laboratories. Of the 138 Guidance pollutants of initial focus, Tier I human health criteria have already been developed for 18 pollutants; Tier I wildlife criteria have been developed for four pollutants; and Tier I aquatic life criteria have been developed for 16 pollutants. Review of the literature indicates that human health criteria can potentially be calculated for an additional 106 pollutants, and wildlife criteria for an additional three pollutants. The Guidance does not require States to adopt provisions requiring development of wildlife toxicity test data for use in the Tier I or Tier II methodologies; therefore, respondents would not be expected to conduct studies to support the development of wildlife criteria. Further, respondents would not be expected to conduct aquatic life

bioassays for the following pollutants: the 52 pollutants that have been identified as carcinogens because the human health criteria for such pollutants would always be more stringent; the eight pollutants that have been identified as BCCs due to the associated high bioaccumulation factor; and nine pollutants for which National criteria have been developed since nearly enough information has already been collected on such pollutants. Therefore, respondents are assumed to conduct bioassays to support the development of water quality criteria for 14 human health and 53 aquatic life pollutants. Further, because permits are renewed every 5 years, it was assumed that one-fifth (i.e., three human health and 11 aquatic life) of the criteria would be developed each year.

For each of the pollutants that may require Tier I tests, costs include:

- Aquatic life acute tests - It was assumed that aquatic life acute tests costing $2,600 each would be conducted for eight species per pollutant (i.e., a cost of $20,800 per pollutant for 11 pollutants).
  Criteria development - It was assumed that 56 hours per pollutant would be required using an outside consultant (i.e., a cost of $1,909 per pollutant)

- Aquatic life chronic tests - It was assumed that aquatic life chronic tests costing $11,500 each would be conducted for three species per pollutant (i.e., a cost of $34,500 per pollutant for 11 pollutants).
  Criteria development - It was assumed that 56 hours per pollutant would be required using an outside consultant (i.e., a cost of $1,909 per pollutant)

- Human health tests - It was assumed that human health tests cost approximately $70,000 for a LD_{50} test and $100,000 for a 90-day subchronic study (i.e., $170,000 per pollutant for 3 pollutants).
  Criteria development - It was assumed that 56 hours per pollutant would be required using an outside consultant (i.e., a cost of $1,909 per pollutant)

Costs of overseeing the outside laboratories at 10 hours a laboratory were $4,718 for POTWs and $17,352 for private industry, for a total of $22,070 in oversight costs.

The costs presented above are conservative in that they do not account for data that has already been collected and could be used to support the development of criteria in conjunction with the new data. They also do not discount the costs attributable to existing requirements in State and Federal programs to develop water quality criteria under specified circumstances. In developing the costs, it was also assumed that respondents would undertake the responsibility of collecting the supporting data even though it is not required by the Guidance. However, in estimating the costs, EPA has assumed that respondents will coordinate perfectly in the data collection which may temper the conservative nature of the estimate slightly.

EXHIBIT 6-5

ANNUAL RESPONDENT COST FOR BIOASSAYS TO SUPPORT THE DEVELOPMENT OF WATER QUALITY CRITERIA

	Cost per Pollutant	Number of Pollutants	Annual Respondent Cost
Aquatic Life Acute Tests	$22,709	11	$249,800
Aquatic Life Chronic Tests	$36,409	11	$400,500
Human Health Tests	$171,909	3	$515,727
Wildlife Protection Tests	$0	0	$0
Laboratory Oversight Costs			$22,070
Total		64	$1,188,097

Antidegradation Policy Cost

Exhibit 6-6 summarizes the estimated respondent costs associated with implementation of provisions consistent with the Guidance antidegradation provisions. Based on compliance cost analyses performed for the Regulatory Impact Analysis, EPA expects that 5 percent of 3,795 permittees (approximately 190) will discharge BCCs. Conservatively assuming that all of these permittees will prepare and submit an antidegradation demonstration each year, the total respondent burden is estimated to be about 11,400 hours annually. Acknowledging that one-third of the permittees affected by antidegradation provisions are POTWs, the total respondent cost is estimated to be $330,524.

EPA expects that 5 percent of the permittees (approximately 190) are likely to request an increase in permit limits for non-BCCs. Conservatively assuming that all of these respondents will prepare and submit an antidegradation demonstration each year, the total respondent burden is estimated to be about 7,600 hours annually. Acknowledging that one-third of the permittees affected by the final Guidance are POTWs, the total respondent cost is estimated to be $220,354.

EXHIBIT 6-6

SUMMARY OF RESPONDENT COST FOR ANTIDEGRADATION

	# of Facilities	Burden Estimate	Estimated Cost
Municipal - BCCs	65	3,800	$71,440
Non-Municipal - BCCs	125	7,600	$259,084

Municipal - non-BCCs	65	2,533	$47,620
Non-Municipal - non-BCCs	125	5,067	$172,734
Total	76	19,000	$550,878

WET Data Collection Costs

It was assumed that data would be collected to determine if WET limits should be included in a permit. Because monitoring for WET limits requires more sophisticated quarterly tests using a macroinvertebrate and a fish, EPA assumed all monitoring for WET limits would be conducted by outside laboratories. The costs of collecting data, and the costs of monitoring for WET limits were estimated to be about $604,000 annually in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Initiative* [Date] (see Exhibit 6-7). These results are based on the assumption that acute WET tests on average will cost $750 and chronic WET tests on average will cost $1,500.

EXHIBIT 6-7

SUMMARY OF ANNUAL RESPONDENT COST FOR COLLECTING DATA AND MONITORING FOR WET LIMITS

Discharger Category	Annual Respondent Cost
Major Dischargers	
Mining	$17,000
Food	$0
Pulp and Paper	$15,400
Inorganic Chemical Man.	$0
Org. Chemical Man./Petroleum Refining	$138,400
Metal Manufacturing	$0
Metal Finishing	$12,000
Steam Electric	$12,000
Miscellaneous	$38,400
Municipal (POTWs)	$54,000
Subtotal	$287,200
Minor Dischargers	
Non-Municipal	$0
Municipal	$316,800
Subtotal	$316,800
Total	$604,000

6.2.2 MONITORING COSTS

Due to implementation of Guidance provisions addressing monitoring and reporting, respondent cost was estimated to increase by $1,724,738 annually. Guidance activities resulting in increased respondent costs include monitoring and reporting requirements for:

- WQBEL compliance monitoring;
- WET limit compliance monitoring;
- Pollutant Minimization Programs (PMPs) reporting and monitoring; and
- Bioconcentration studies required when Guidance-based WQBELs for BCCs are below analytical detection levels.

Based on previous experience and interviews with program personnel, EPA determined that approximately 30 percent of Guidance related monitoring associated with WQBELs and PMPs would be conducted by outside laboratories. Because monitoring for WET limits and bioconcentration studies require more sophisticated tests, all related monitoring was assumed to be conducted by outside laboratories.

WQBEL Compliance Monitoring Costs

Respondent costs, assuming approximately 70 percent of WQBEL monitoring is conducted in-house, were estimated to be approximately $284,000 annually (see Exhibit 6-8). These costs were estimated based on the estimated analytical costs provided in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date] (which were based on a survey of laboratory costs).

EXHIBIT 6-8

SUMMARY OF ANNUAL RESPONDENT COST FOR WQBEL COMPLIANCE MONITORING

Discharger Category	Annual Respondent Cost		
	In-House Monitoring	Contracted Monitoring	Total Cost
Major Dischargers			
Food and Food Products	$0	$0	$0
Inorganic Chemicals	$12,664	$5,428	$18,092
Metal Finishing	$1,764	$756	$2,520
Mining	$1,764	$756	$2,520
Metals Manufacturing	$63,017	$27,007	$90,024
Miscellaneous	$6,526	$2,797	$9,323
Municipals (POTWs)	$45,018	$19,294	$64,312

Organic Chemical Man./Petroleum Refining	$3,780	$1,620	$5,400
Pulp and Paper	$54,438	$23,331	$77,769
Steam Electric	$9,912	$4,248	$14,160
Major Dischargers Subtotal	$198,884	$85,236	$284,120
Minor Dischargers			
Municipals	$0	$0	$0
Non-Municipals	$0	$0	$0
Minor Dischargers Subtotal	$0	$0	$0
Total	$198,884	$85,236	$284,120

WET Limit Compliance Monitoring Cost

Similar to pollutant-specific WQBELs, if a WET limit is established for a facility, then periodic compliance monitoring would be required. Based on the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date], existing State compliance monitoring requirements were deemed adequate for those facilities that required WET limits. Therefore, no additional cost was estimated related to implementation of WET compliance monitoring provisions consistent with the final Guidance.

Pollutant Minimization Program (PMP) Costs

The Guidance requires that permittees develop PMPs for pollutants in a discharge for which WQBELs have been established below quantification levels. Total respondent cost associated with the establishment of PMPs was estimated to be approximately $990,618 annually (see Exhibit 6-9). Information collection activities associated with PMPs include:

- An annual review/semi-annual monitoring of potential sources of the pollutants;
- Quarterly influent monitoring and reporting; and
- Development and submittal of a control strategy, including implementation of appropriate practicable control measures; and
- An annual status report

Respondent cost associated with semi-annual monitoring of pollutant sources, and quarterly influent monitoring was estimated to be about $167,324 annually.

The one-time cost of developing a control strategy was estimated to be about $25,000 per facility in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date]. It was estimated that about 137 municipal and 40 non-municipal facilities would be required to develop approvable control strategies. For this ICR it was

assumed that this one-time cost would be written off over 10 years. Therefore, the annual respondent cost for developing the strategies was estimated to be about $681,631.

EXHIBIT 6-9

SUMMARY OF ANNUAL RESPONDENT COST FOR POLLUTANT MINIMIZATION PROGRAMS

Discharger Category	Annual Respondent Cost			
	PMP Monitoring	Approvable Strategy	Annual Report	Total Cost
Major Dischargers				
Food and Food Products	$0	$0	$0	$0
Inorganic Chemicals	$529	$28,476	$5,695	$34,699
Metal Finishing	$0	$0	$0	$0
Mining	$103	$10,678	$2,136	$12,916
Metals Manufacturing	$0	$0	$0	$0
Miscellaneous	$2,900	$26,696	$5,339	$34,935
Municipals (POTWs)	$155,033	$487,641	$97,528	$740,202
Organic Chemical Man./Petroleum Refining	$1,006	$26,696	$5,339	$33,041
Pulp and Paper	$7753	$101,444	$25,628	$134,825
Steam Electric	$0	$0	$0	$0
Major Dischargers Subtotal	$167,324	$681,631	$141,665	$990,618
Minor Dischargers				
Municipals	$0	$0	$0	$0
Non-Municipals	$0	$0	$0	$0
Minor Dischargers Subtotal	$0	$0	$0	$0
Total	$167,324	$681,631	$141,665	$990,618

Annual status reports were estimated in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* to cost about $5,000 per facility. EPA determined that annual status reports would be prepared by outside contractors. The resulting respondent cost was estimated to be approximately $141,665 annually for 177 permittees expected to

prepare and submit PMPs in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance.*

Bioconcentration Studies

Permitting authorities may require bioconcentration studies for WQBELs included in a permit that are below detection limits based on EPA approved methods. EPA conservatively assumed that such studies would be required and determined that it is very likely that permittees would contract with laboratories to conduct such studies.

A contractor cost of $5,000 per pollutant for bioconcentration studies was assumed for the costs estimated in the *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date]. In sum, total respondent costs for bioconcentration studies were estimated to be about $450,000 annually.

6.2.3 REGULATORY RELIEF OPTION COSTS

Additional respondent cost associated with preparing requests for regulatory relief from provisions consistent with the Guidance requirements was estimated to be approximately $512,568 annually (see Section 6.1.3 for more detail). The *Final Assessment of Compliance Costs Resulting from Implementation of the Great Lakes Water Quality Guidance* [Date] estimates that the cost to the facilities pursuing relief from Guidance-based WQBELS to range between $1,000,000 to $20,000 per pollutant depending upon the type of relief being pursued. These costs are based on EPA and State experience. EPA assumed a mid-range of $200,000 per pollutant for supporting requests for regulatory relief. If 18 requests are received per year as assumed in Section 6.1.3, and assuming this one-time cost would be annualized over a 10 year period at 7 percent interest, then the annual costs associated with pursuing regulatory relief options is estimated to be $512,568.

6.3 ESTIMATING GOVERNMENT BURDEN AND COSTS

EPA estimated annual State/Federal government burden to be approximately 6,475 hours. State/Federal government cost was estimated to be approximately $193,700 annually. The State government burden and costs estimated herein, amend the State government burden and costs estimated in the *Applications ICR, Discharge Monitoring Report ICR,* and *Modification and Variance ICR.* Specific burden and cost estimates for State and Federal governments are summarized in the following sections. EPA estimated little additional federal government applications burden or cost because all the Great Lakes States are delegated NPDES permitting authorities.

6.3.1 GOVERNMENT APPLICATIONS BURDEN AND COST

EPA estimated the total burden to States and the Federal government associated with applications to be 4,186 hours, resulting in a cost of $125,170

Burden and Costs Associated With Studies to Support the Development of Water Quality Criteria

EPA estimated the State application burden associated with data collection to support the development of water quality criteria to be 2,714 hours with an associated cost of $81,158. The basis of these values is as follows.

EPA estimated the following burden and associated costs with the review of Tier I criteria development. It was assumed that only the minimum number of studies would be submitted for review. Because the Guidance does not require States to develop wildlife criteria using the Tier II methodology, studies would not be expected to be submitted to support the development of Tier I wildlife criteria.

Aquatic Criteria: 1.5 hours/study (8 acute studies + 3 chronic studies) + 2 hours to review criterion development = 18.5 hours per pollutant (i.e., 203.5 hours for 11 pollutants [53 potential pollutants divided by 5 permit years]).

Human Health Criteria: 2 hours per study * 2 studies + 2 hours to review criterion development = 6 hours per pollutant (i.e., 18 hours for 3 pollutants [14 potential pollutants divided by 5 permit years]).

The annual costs associated such burdens, using the government employee hourly rate of $29.90, are $6,085 and $538, respectively.

EPA estimated an annual burden to the Federal government of 400 hours to set-up and maintain the water quality database to serve as the Information Clearinghouse.

States may develop additional human health and wildlife criteria for some pollutants where data already exists. EPA has estimated the following burden and costs associated with those tasks:

To perform the search for information - 40 hours/pollutant (i.e., 872 hours, considering the 106 pollutants and 3 pollutants over the 5-year permit term)

To evaluate the literature and calculate the criterion - 40 hours/pollutant (i.e., 872 hours)

To peer review - 8 hours/pollutant (i.e., 174.4 hours)

To prepare the report and document procedures - 8 hours/pollutant (i.e., 174.4 hours)

The total annual burden to develop additional human health and wildlife criteria of 2,492.8 hours results in an annual associated cost of $74,535, using the government employee hourly rate of $29.90.

Antidegradation Burden and Costs

EPA estimated the State applications burden associated with antidegradation demonstration to be approximately 1,216 hours annually. The State cost was estimated to be $36,358 annually. Such estimates do not include burden and cost associated with implementing current antidegradation requirements.

EPA determined that it would take a State about 2 days to review an antidegradation demonstration. EPA also determined that approximately 76 antidegradation policy demonstrations would be submitted annually.

Consistency Review Burden and Costs

An additional burden that will fall on State and Federal government is the preparation and review of State regulations and criteria for consistency with the Guidance over the course of the first five years of the program. EPA has estimated that preparation of the materials for Federal review will require 40 hours of burden per State (i.e., 320 hours for all Great Lakes States or 64 hours per year). The Federal government review of such materials will require a burden of 120 hours per State (i.e., 960 hours for all Great Lakes States or 192 hours per year). The annual cost associated with the preparation of the materials is $1,914 and for the consistency review is $5,741, using the government hourly rate of $29.90.

6.3.2 GOVERNMENT MONITORING BURDEN AND COST

EPA estimated the State government burden for reviewing an approvable control strategy which is one component of a permittee's PMP to be about 4 hours per facility. It was estimated in the *Final Assessment of Compliance Costs Resulting From Implementation of the Great Lakes Water Quality Guidance* [Date] that about 137 municipal and 40 non-municipal facilities would be required to develop approvable control strategies. Therefore, the annual State monitoring burden was estimated to be about 708 hours. The estimated annual State government monitoring cost was $21,169. EPA estimated no additional federal government monitoring burden or cost.

6.3.3 GOVERNMENT REGULATORY RELIEF OPTION BURDEN AND COST

EPA estimated the State government burden associated with requests for regulatory relief to be approximately 1,584 hours. The State government regulatory relief option cost was estimated to be approximately $47,362. No additional burden or cost was estimated for the federal government.

To determine the State burden associated with regulatory relief requests, EPA estimated that State government would require:

- Half a day (4 hours) to review a regulatory relief request for completion, including any contact with the permittee for additional information;
- Half a day (4 hours) for public notice and comment (assuming the regulatory relief mechanism is independent of regular permit public notice); and
- 10 days (80 hours) to analyze the regulatory relief option request, decide if it is justified, justify the decision, and prepare a permit modification if necessary.

In sum, EPA estimated 11 days (88 hours) of State government burden associated with evaluation of regulatory relief options. As discussed in Section 6.1.3, EPA estimated 18 regulatory relief option requests would be processed annually.

6.4 TOTAL BURDEN HOURS AND COSTS, AND SUMMARY OF THE CHANGE IN BURDEN

Exhibit 6-10 presents the figures for total burden and costs to respondents and governments. Exhibit 6-11 presents the change in burden and costs in the *Applications ICR*, *Discharge Monitoring Report ICR*, and *Modification and Variance ICR* for respondents and governments. Exhibit 6-12 presents the total burden and costs to both local and State governments. All of the burden and costs to local governments are associated with the operation of a publicly owned treatment works (POTW).

EXHIBIT 6-10

SUMMARY OF BURDEN AND COST ESTIMATES FOR IMPLEMENTATION OF GREAT LAKES GUIDANCE

	Respondent		State/Federal Government		Total	
	Annual Burden (Hours)	Annual Cost	Annual Burden (Hours)	Annual Cost	Annual Burden (Hours)	Annual Cost
Applications						
Water Quality Criteria	35,612	$1,188,097	2,714	$81,158	38,326	$1,269,255
Antidegradation Policy	19,000	$550,878	1,216	$36,358	20,216	$587,236
WET Data Collection	17,718	$604,000	—	—	17,718	$604,000
Consistency Review	—	—	256	$7,654	256	$7,654
Total	72,330	$2,342,975	4,186	$125,170	76,516	$2,468,145
Monitoring						
WQBELs	153	$284,120	—	—	153	$284,120
WET Limits	—	—	—	—	—	—
PMPs	28,182	$990,618	708	$21,169	28,890	$1,011,787
BCCs	13,200	$450,000	—	—	13,200	$450,000
Total	41,535	$1,724,738	708	$21,169	42,243	$1,745,907
Regulatory Relief Options	15,036	$512,568	1,584	$47,362	16,620	$559,930
Total Guidance	128,901	$4,580,281	6,478	$193,701	135,379	$4,773,982

EXHIBIT 6-11

SUMMARY OF THE CHANGE IN BURDEN AND COSTS FOR IMPLEMENTATION OF THE GREAT LAKES GUIDANCE

	Respondent		State/Federal Government	
	Annual Burden (Hours)	Annual Cost	Annual Burden (Hours)	Annual Cost
Applications				
Guidance	72,330	$2,342,975	4,186	$125,170
Applications ICR	1,130,866	$41,121,728	55,387	$1,391,895
Percent Change	6.4%	5.7%	7.6%	9.0%
Monitoring				
Guidance	41,535	$1,724,738	708	$21,169
Discharge Monitoring Report ICR	16,080,000	$252,282,369	172,480	$3,195,976
Percent Change	0.3%	0.7%	0.4%	0.7%
Regulatory Relief Options				
Guidance	15,036	$512,568	1,584	$47,362
Mod. and Variance ICR*	52,918	$1,371,852	35,456	$891,009
Percent Change	28.4%	37.4%	4.5%	5.3%

* Includes State government and federal government burden hours and costs. They were not reported independently in the *Modification and Variance ICR*.

EXHIBIT 6-12

SUMMARY OF STATE AND LOCAL BURDEN AND COST ESTIMATES FOR IMPLEMENTATION OF GREAT LAKES GUIDANCE

	Local Government		State Government		Total	
	Annual Burden (Hours)	Annual Cost	Annual Burden (Hours)	Annual Cost	Annual Burden (Hours)	Annual Cost
Applications						
Water Quality Criteria	11,870	$393,394	2,314	$69,189	14,184	$462,583
Antidegradation Policy	6,334	$119,060	1,216	$36,358	7,550	$155,418
WET Data Collection	5,906	$370,800	—	—	5,906	$370,800
Consistency Review	—	—	64	$1,914	64	$1,914
Total	24,110	$883,254	3,594	$107,461	27,704	$990,715
Monitoring						
WQBELs	47	$64,312	—	—	47	$64,312
WET Limits	—	—	—	—	—	—
PMPs	11,727	$740,202	708	$21,169	12,435	$761,371
BCCs	4,400	$150,000	—	—	4,400	$150,000
Total	16,174	$954,514	708	$21,169	16,882	$975,683
Regulatory Relief Options	5,012	$170,856	1,584	$47,362	6,596	$218,218
Total Guidance	45,296	$2,008,624	5,886	$175,992	51,182	$2,184,616

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