Industry Technical Questionnaire:
Phase III Cooling Water Intake Structures
Seafood Processing Vessels

September 2003

U.S. Environmental Protection Agency (EPA)
Office of Science and Technology
Washington, DC

FORM APPROVED — OMB CONTROL NO. 2040-0213 — APPROVAL EXPIRES: June 30, 2006

Notice of Estimated Burden

EPA estimates that completion of the entire *Industry Technical Questionnaire: Phase III Cooling Water Intake Structures–Seafood Processing Vessels* will require an average of 8 hours per vessel. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. OW-2003-0005, which is available for public viewing at the Water Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426. An electronic version of the public docket is available through EPA Dockets (EDOCKET) at http://www.epa.gov/edocket. Use EDOCKET to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. Once in the system, select "search," then key in the docket ID number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. (OW-2003-0005) and OMB control number (2040-0213) in any correspondence.

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Certification Statement

Instructions

The individual responsible for directing or supervising the preparation of the enclosed *Industry Technical Questionnaire: Phase III Cooling Water Intake Structures – Seafood Processing Vessels* must read and sign the Certification Statement below before returning the completed documents to the U.S. Environmental Protection Agency. The certifying official must be a responsible corporate official or his/her duly authorized representative. The Certification Statement must be completed and submitted in accordance with the requirements contained in the *Code of Federal Regulations* at 40 CFR 122.22.

I certify under penalty of law that the attached questionnaire was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, accurate and complete. In those cases where we did not possess the requested information, we have provided best engineering estimates or judgments. We have, to the best of our ability, indicated what we believe to be company confidential business information as defined under 40 CFR Part 2, Subpart B. We understand that we may be required at a later time to justify our claim in detail with respect to each item claimed confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment as explained in Section 308 of the Clean Water Act (33 U.S.C., Section 1318).

_____ _____

Signature of Certifying Official Date

_____ ( ) _____

Printed Name of Certifying Official Telephone No.

_____

Title of Certifying Official

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Table of Contents

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General Information and Instructions

What is the Purpose of this Questionnaire?

The U.S. Environmental Protection Agency (EPA) is currently developing regulations under Section 316(b) of the Clean Water Act, 33 U.S.C., Section 1326(b). Section 316(b) provides that any standard established pursuant to Sections 301 or 306 of the Clean Water Act (CWA) and applicable to a point source requires that the location, design, construction, and capacity of *cooling water intake structures* (CWIS) reflect the best technology available (BTA) for minimizing *adverse environmental impact*. Answers to the enclosed technical questionnaire will help EPA identify the types and sizes of Seafood Processing Vessels that are subject to Section 316(b).

Please note that data from this technical questionnaire are *not* intended to identify whether a specific vessel's cooling water intake structures are having an adverse impact on the environment. Moreover, questionnaire responses are *not* intended to identify whether a specific vessel is employing BTA with respect to minimizing adverse environmental impacts from cooling water intake structures, though they may help EPA determine BTA options for various types of seafood processing vessels. This questionnaire is a tool for gathering the following information: (1) type and nature of vessels using cooling water; (2) specific uses of cooling water; (3) design and configuration of cooling water systems and cooling water intake structures; (4) types of technologies being used at intake structures; and (5) whether vessels have previously evaluated the environmental impacts of their cooling water intake structures. Data from this questionnaire will be factored into ongoing research being conducted by EPA that is more specifically designed to determine the nature of adverse impacts and the types of control technologies that might minimize such impacts. All of EPA's research efforts will support the development of regulatory options, some of which will subsequently be fashioned into a proposed rulemaking that will be put forth for public review and comment. The current schedule for Phase III 316(b) regulations is for EPA to finish a proposed rule by November 1, 2004, and to take final action by June 1, 2006. More information is available at www.epa.gov/waterscience/316b/.

This questionnaire requests information about each vessel selected to receive the survey. If a firm owns vessels not selected for the survey, the firm does not need to complete the survey for those vessels. Please note that it is not the intent of EPA to require vessel personnel to go to unusual lengths to retrieve information to respond to this questionnaire. Responses should be based on data that can be accessed from vessel records with reasonable diligence.

This questionnaire consists of four main sections. Section A requests general vessel information, such as vessel name and location. Section B requests information from vessels on such topics as National Pollutant Discharge Elimination System (NPDES) permit status, whether cooling water is used and, if so, whether it is withdrawn by the vessel from surface water. Finally, information is requested on the design intake flow and on the types of activities for which the vessel uses cooling water drawn directly from surface waters. The purpose of these two sections is to help EPA determine the nature of vessels within an industry group that use cooling water. Additionally, the information will help EPA identify (i.e., "screen") vessels that are not subject to Section 316(b). These out-of-scope vessels will be exempted from completing the remaining sections of the questionnaire. Vessels that will be considered "out-of-scope" will include those that; (1) are not point sources as defined under Section 502(14) of the Clean Water Act (33 U.S.C., 1362(14)); (2) do not use cooling water as that term is defined for the purposes of this questionnaire; or (3) do not receive any of their cooling water supply from a surface water source. Section C requests vessels to provide basic design and operational data on their cooling water intake structures and cooling water systems. Many of the questions are in multiple-choice format. The following types of information are being requested: (1) originating

sources of cooling water; (2) total cooling water intake flow rates and operating days for a typical calendar year; (3) control technologies being used at intake structures; and (4) whether vessel or firm owners have ever conducted or commissioned environmental or ecological studies of the potential impacts of any of their cooling water intake structures. Section D requests vessel and parent firm economic data. It is only applicable to vessels that are out-of-scope and therefore not required to complete a separate economic questionnaire. This section of the questionnaire requests information on the: (1) number of vessel full time employees and revenue; (2) name of the domestic parent firm; (3) domestic parent full time employees; and (4) the SIC codes of the domestic parent firm. EPA is requesting this basic financial information for the purpose of completing a Small Business Regulatory Enforcement Fairness Act (SBREFA) analysis.

What is the Authority for This Questionnaire?

EPA has authority to administer this questionnaire under Section 308 of the CWA (33 U.S.C., Section 1318). Late filing of the questionnaire, or failure to follow any related EPA instructions, may result in civil penalties, criminal fines, or other sanctions provided by law.

Who Must Complete This Questionnaire?

This questionnaire has been designed for completion by industries that are point-sources as defined under Section 502 of the Clean Water Act (33 U.S.C. Section 1362). Entities potentially affected by this action are those existing facilities that use cooling water intake structures to withdraw water from waters of the U.S. for cooling purposes and that have or are required to have a National Pollutant Discharge Elimination System (NPDES) permit issued under Section 402 of the Clean Water Act (CWA). This questionnaire is primarily intended for Seafood Processing Vessels.

Where to Get Help?

☎ **Toll-Free Help Line**

Industry Technical Questionnaire: Phase III Cooling Water Intake Structures

Staffed by:
Tetra Tech, Inc.
Available weekdays, 9:00 a.m. to 5:00 p.m., Eastern Time

Toll-Free Phone No.: (888) 733-1449

Direct Dial Phone No.: (703) 385-5073 (long distance charges will apply)

Certification Statement

A responsible corporate official or his/her duly authorized representative must verify the accuracy of the responses to the questionnaire by reading and signing the enclosed Certification Statement. This statement must be returned to EPA along with the completed questionnaire.

When and How to Return the Questionnaire?

You must complete and return the questionnaire and Certification Statement to EPA within *30 calendar days* after receiving the materials at your facility or firm. Please return your materials, in the enclosed self-addressed envelope, to:

✉ **Industry Technical Questionnaire: Phase III Cooling Water Intake Structures**

316(b) Survey
U.S. Environmental Protection Agency
c/o Tetra Tech, Inc.
10306 Eaton Place, Suite 340
Fairfax, VA 22030

NOTE: *Please keep a copy of the completed questionnaire and Certification Statement for your records*.

If you have extenuating circumstances that preclude you from meeting the 30 day deadline, please contact Jennifer Chan at the following email address: chan.jennifer@epa.gov to discuss your situation.

Confidential Business Information

You may assert a business confidentiality claim for *some* or *all* of your responses to this questionnaire, as described in 40 CFR 2.203(b) *(see full text below)*. Complete regulations governing confidentiality of business information (CBI) appear in 40 CFR, Part 2, Subpart B (see the following website: www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr2_00.html).

> 40 CFR 2.203(b) *Method and time of asserting business confidentiality claim.* A business which is submitting information to EPA may assert a business confidentiality claim covering the information by placing on (or attaching to) the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as 'trade secret,' 'proprietary,' or 'company confidential.' Allegedly confidential portions of otherwise nonconfidential documents should be clearly identified by the business, and may be submitted separately to facilitate identification and handling by EPA. If the business desires confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state.

You may claim confidentiality of business information for any of your responses by one of the methods described above. If no claim of confidentiality has been made, EPA may make the data available to the public without further notice. Please note that you may be required to justify any claim of confidentiality at a later time. Note, however, that certain types of information cannot be considered confidential under the CWA (e.g., vessel location, water body, water body type, intake flow data).Your answers to these questions will be part of the public record.

If EPA reveals information covered by a claim of confidentiality, the Agency will strictly follow the requirements and procedures set forth in 40 CFR Part 2, Subpart B. Overall, EPA may reveal submitted information protected by a CBI claim *only* to other employees, officers, or authorized representatives of the United States who are responsible for implementation of the Clean Water Act. EPA has extensive standard operating procedures in place to handle, store, and transmit CBI data and has a long history of successfully managing this type of information. In addition, personnel expected to handle CBI data are required by the Agency to be trained and certified.

Agency contractors will have access to CBI data so that work can be performed under their contracts relative to the Section 316(b) rulemaking. All EPA contracts require that contractor employees must use CBI data *only* to perform work specified by EPA. The information is *not* to be shown to anyone, other than EPA officials, without prior written approval having been received from the affected business or from EPA's legal office.

You may check the circle below to assert a business confidentiality claim for all eligible information in this questionnaire.

All eligible data are CBI ○

Specific Instructions for Completing the Questionnaire

Vessel or parent firm personnel most knowledgeable of the subject areas covered by the questions posed should complete the questionnaire:

- **Please answer the questions in sequence unless you are directed to SKIP forward in the questionnaire.** This is important since many questions are only applicable to some respondents.
- **Clearly mark responses to all questions with a black or blue ink pen, *or* type responses in the spaces provided.**
- For each question, **please read all instructions and definitions carefully**. Respondents should only report vessel specific data for the vessel identified on page 1.
- Most key terms are defined at the point where they first appear in the questionnaire. They are also defined in the ***Glossary to Questionnaire***, which is attached to the back of the questionnaire. **Before responding to a given question, please read the definitions of any key terms used and any question-specific instructions.**
- **Please use the units specified when responding to questions requesting measurement data (e.g., gallons per day).**
- **Please provide responses on the basis of the time period(s) cited in each question.** Note that the time periods under which information is requested may vary from question to question.
- **Please indicate whether information provided in any of your responses is confidential.** Such information will be protected under EPA's confidentiality procedures. To claim a particular response as containing confidential business information, simply mark (✓) the circle at the end of each question, if one is provided or follow the identification procedures described on the previous page and found under 40 CFR 2.203(b).

Section A: General Vessel Information

1. (a) Does the above mailing label reflect the vessel's correct name, US Coast Guard vessel identification number and the full legal name and address?

- ○ Yes (if "Yes," skip to Question 2)
- ○ No (if "No," continue to 1(b))

(b) Please provide the complete legal name and mailing address for the owner of the vessel:

Name of Vessel:_____

Owner Name: _____

Owner Street Address:_____

P.O. Box (if applicable):_____

City, State ZIP:_____

Telephone No: (_____) _____

US Coast Guard vessel identification number*: _____

**The US Coast Guard vessel identification number will either consist of 6-8 digits or may begin with 1-2 letters followed by 6-7 digits.*

NOTE: *If you are not the operator, contractor, owner, or lessee for this facility, please telephone the helpline (see Page iv) to notify us.*

2. Please identify the person responsible for questionnaire responses, and please provide the appropriate title and contact information:

NOTE: *The vessel contact person provided here should be the person most knowledgeable about the information provided in this survey. This person is not required to be the certifying official.*

Name: _____

Title: _____

Employer *(full legal name)***:** _____

Relationship of Employer to Vessel *(e.g., vessel owner, vessel operator, domestic parent firm, contractor, etc.)***:** _____

Telephone No: (_____) _____

Fax No: (_____) _____

Best Time to Contact: _____

Section B: General Scoping Data

3. Is the vessel presently (in 2003) in commercial service for seafood processing (for example, as a mothership, factory trawler, catcher-processor, or processing barge)?

- ○ Yes (if "Yes," continue)
- ○ No (if "No," stop. Please sign the certification statement and return with the questionnaire)

NOTE: *To clarify for vessels which are not in a commercial business, interpret this question as "Is your vessel currently operating?"*

4. Does the vessel presently have or is the vessel presently in the process of obtaining a National Pollutant Discharge Elimination System (NPDES) permit?

NOTE: *NPDES permits are required under Section 402 of the Clean Water Act (33 U.S.C. 1342 et seq.) by any point source that discharges pollutants directly to waters of the United States. Vessels that discharge 100 percent of their effluent (including storm water) to publicly-owned treatment works, privately-owned treatment works, and/or to ground water injection wells should answer "No" to this question. Your seafood processing vessel may not be required to have a NPDES permit, depending on the policies and practices of the permitting authorities for the waters where the vessel discharges seafood processing waste*

- ○ Yes (if "Yes," continue)
- ○ No (if "No," stop. Please sign the certification statement and return with the questionnaire)

Please provide the NPDES permit number for the vessel:

_____

5. Since January 1, 2002, has *cooling water* been used for contact or noncontact cooling purposes on a vessel?

DEFINITION: For the purposes of this questionnaire, the term "cooling water" refers to both contact and noncontact cooling water, including water used for engine cooling, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes employed or from auxiliary operations on the vessel's premises.

NOTE: *Please consider all cooling water used regardless of the type of water source or provider from which it has been obtained.*

- ○ Yes (if "Yes" continue)
- ○ No (if "No", stop. Please sign the certification statement and return with the questionnaire)

6. Since January 1, 2002, has the vessel directly obtained any portion of its cooling water from a *surface water source*?

NOTE: *In order for a vessel to directly withdraw cooling water from surface water, it must have an intake structure, such as a sea chest.*

DEFINITION: For the purpose of this questionnaire, surface water includes lakes, ponds, or reservoirs; nontidal rivers or streams; tidal rivers; estuaries; fjords; oceans, and bays/coves. A cooling water intake structure is the total structure and associated technologies used to direct water from a water body into a vessel up to the point of the first intake pump or series of pumps. The intended use of cooling water is to absorb waste heat. If a vessel has an intake structure that withdraws water for other purposes in addition to cooling, the entire intake structure should be considered a cooling water intake structure for the purposes of this questionnaire.

- ○ Yes (if "Yes" continue)
- ○ No (if "No", stop. Please sign the certification statement and return with the questionnaire)

7. (a) What is the vessel's design intake flow (check appropriate unit)

_____ _____

- ○ gpd (gallons per day)
- ○ MGD (million gallons per day)
- ○ cfs (cubic feet per second)

DEFINITION: "Design intake flow" is the total design capacity of the cooling water intake structures. A cooling water intake structure is an intake structure that withdraws any portion of water for cooling purposes, even if a large portion of that water is used for non-cooling purposes. For example, if an intake structure (e.g., seachest) has one or more lines and pumps withdrawing from it, some supplying cooling systems, and some not (e.g. fire mains), the capacity of all pumps withdrawing through the intake structure would be counted. If a fire main or a ballast tank is supplied through a separate intake structure that does not have any lines & pumps supplying cooling water, that capacity would not be counted.

(b) Is the design intake flow less than 2 million gallons per day?

- ○ Yes (if "Yes," skip to Section D. You do not need to complete Section C.)
- ○ No (if "No," proceed to next question, in Section C.)

Section C: Design and Operational Data

8. List the components of design intake flow that are used intermittently or infrequently, and estimate the percentage of the time these are used.

NOTE: *Interpret "intermittently or infrequently" to mean "operating less than 25% of the time that the vessel is in use." For example, the capacity of a pump used to supply fire mains may have been included when estimating design intake flow above. You would list here the pump capacity, the units reported (for example, gpm, gpd, cfs) and the estimated percent of the time this capacity is used. Please group pumps having similar functions (e.g. fire mains, ballasting, etc.).*

	Pump or Service Function	Design Intake Capacity	Units of Measurement	Percent of Time This Capacity Is Used (%)
8(a)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(b)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(c)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(d)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(e)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(f)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(g)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
8(h)			○ gpm ○ cfs ○ gpd ○ m^3/hr	
Please mark this circle if you are copying this page for additional components of the design intake flow ○				

9. What is the vessel's total installed power generation capacity (horsepower)?

Main engine _____ hp
Auxiliary engine _____ hp

10. (a) In the table below, please indicate the major activities for which your vessel has used cooling water directly withdrawn from surface water since January 1, 2002?

NOTE: *Please check (✓) all applicable activities. Use the spaces provided to write any explanations or qualifications that you think necessary.*

Item No.	Activities	
10(a)	**Engine Cooling** (Including cooling of engines and generators; fuel, engine and transmission oil; and antifreeze)	○
10(b)	**Refrigeration for the purpose of cooling or freezing fish, shellfish, and processed seafood** (For example, refrigeration, plate, closed-cycle ammonia, tunnel or blast freezing, recirculating chilled seawater, or other.)	○
10(c)	**Production Line (or Process) Contact or Noncontact Cooling** (For the purposes of this questionnaire, the term production line refers to each of the successive steps taken to produce processed seafood, except the final step of chilling or freezing. This includes cooling of equipment used to cook fish or shellfish.)	○
10(d)	**Cooling of Desalination Equipment**	○
10(e)	**Other (please list)**	○

11. From what type of surface water sources does the vessel withdraw cooling water?

Ocean ○

DEFINITION: *For the purposes of this questionnaire, an ocean is defined as marine open coastal waters other than those water bodies classified as estuaries, embayments, or bays, which are semi-enclosed and have readily identifiable geographic boundaries.*

Estuary or Tidal River ○

DEFINITION: *For the purposes of this questionnaire, an estuary is a semi-enclosed coastal body of water (e.g., bay) that has a free connection with the open sea and is strongly affected by tidal action. In an estuary, sea water is mixed (and usually measurably diluted) with fresh water inflow from rivers.*

Other *(Please name or describe)* ○

12. (a) Describe the area(s) of operation of the vessel while processing seafood. (For example: Gulf of Alaska, Bristol Bay, Bering Sea, Pacific coast offshore of Canada and Alaska, inshore/inside passage of SE Alaska, pier-side at Dutch Harbor, etc.)

_____

_____

(b) Is seafood processing conducted primarily while the vessel is pier-side or at a mooring, rather than at sea?

○ Yes (if "Yes," answer part (c) of this question)

○ No (if "No," continue to question 13)

(c) If you answered Yes to 12(b), please provide the longitude(s) and latitude(s) of the stationary location(s) where seafood is processed:

Location 1:

Lat. (1) **Degrees** _____ **Minutes** _____ **Seconds** _____

Long. (1) **Degrees** _____ **Minutes** _____ **Seconds** _____

Location 2:

Lat. (2) **Degrees** _____ **Minutes** _____ **Seconds** _____

Long. (2) **Degrees** _____ **Minutes** _____ **Seconds** _____

Location 3:

Lat. (3) **Degrees** _____ **Minutes** _____ **Seconds** _____

Long. (3) **Degrees** _____ **Minutes** _____ **Seconds** _____

To report more locations, provide them on a separate page or duplicate this page by photocopying before entering data.

13. How many intake structures does the vessel have that directly withdraw surface water to support, at least in part, contact or noncontact cooling operations within the vessel?

NOTE: *Consider only those intake structures presently operating or temporarily offline (i.e., expected to operate again in the future). Do not include intake structures planned or under construction or permanently offline.*

_____ intake structures

14. Please provide, for a typical calendar year, the number of days per year the cooling water intake structure(s) was/were operational.

> **DEFINITION:** For the purposes of this questionnaire, a typical calendar year is one in which the vessel and its cooling water intake structures are operated in a normal, routine, regular, or otherwise standard fashion. The data provided should be similar to data from other recent calendar years of operation or from projected, near future years of operation (i.e., 2002 to 2004).
>
> **DEFINITION**: For the purposes of this questionnaire, the term operating days refers to the total number of days (1 day = 24 hours) a cooling water intake structure was operational during a calendar year, excluding any days the intake structure was offline for routine maintenance or otherwise was not operational.

NOTE: *Please report for those time periods when the vessel is either engaged in processing seafood or is discharging waste from seafood processing. Thus, do not include time periods when the vessel has ceased processing operations, and is merely in port or in transit. Please use records and data when available; for example, logs and office records could be used to determine time at sea.*

NOTE: *Operating days should be determined by adding the number of hours the CWIS was operational during the year and then dividing by 24 hours per day to get the total number of operating days. For example, if a vessel has operated 5,840 hours during the calendar year, the total hours divided by 24 hours per day are equal to 243 calendar days.*

Intake No.	Operating Days/year
1	
2	
3	
4	
Please mark this circle if you are copying this page for any additional CWIS	○

The information in Question 14 is confidential business information (CBI) ○

15. Please describe each cooling water intake structure, its approximate dimensions, and the bars, screens or strainers *at the first point of entry of source water* to the intakes or seachest (with size of openings).

NOTE: *The numbering of intakes should correspond to the numbers used in Question 14.*

Example Descriptions:

Ex.1: (1) One 4" opening, through-hull perforation about 10' below waterline.
(2) One seachest, 24"L 20"W x 20"D, covered by parallel bars 1" apart.

Ex.2: (1&2) Two seachests each 24"L x 20"W x 18"D, covered by strainer grates with ½ inch openings, approximately 26' below surface.

Intake Number	Description of Cooling Water Intake Structure
1	
2	
3	
4	
Please mark this circle if you are copying this page for any additional CWIS ○	

16. In the table below, please provide the Intake Area, Design Intake Flow and Average Intake Flow for each of the cooling water intake structures.

NOTE: *The numbering of intakes should correspond to the numbers used in Question 15.*

DEFINITION: Intake Area is an estimate of the cross-sectional area of the intake that allows entry of water (e.g., cm^2 or ft^2).

NOTE: *The intake area reported should be the area of the openings permitting water entry (e.g., slots, mesh, perforations) from the ocean or other source of cooling water, at the point(s) of first entry to the structure. The intake areas should not include bars, strainers, and screen surface areas blocking the intake.*

DEFINITION: Design Intake Flow is the aggregate design capacity of the pumps drawing from intake structure (e.g., cfs or gpm).

NOTE: *The sum total of the design intake flows for all the intakes should equal the value listed in Question 7(a).*

DEFINITION: Average Intake Flow is the aggregate capacity of the pumps drawing from intake structure during operation (e.g., cfs or gpm).

NOTE: *Engineering best estimates are acceptable: for example, calculations may be based upon pump design capacity and percent of design capacity expected to be utilized.*

Intake No.	Intake Area	Units for Area	Design Intake Flow	Units for Flow	Average Intake Flow	Units for Flow
1		○ in^2 cm^2 ○		○ gpm cfs ○ ○ gpd m^3/hr ○		○ gpm cfs ○ ○ gpd m^3/hr ○
2		○ in^2 cm^2 ○		○ gpm cfs ○ ○ gpd m^3/hr ○		○ gpm cfs ○ ○ gpd m^3/hr ○
3		○ in^2 cm^2 ○		○ gpm cfs ○ ○ gpd m^3/hr ○		○ gpm cfs ○ ○ gpd m^3/hr ○
4		○ in^2 cm^2 ○		○ gpm cfs ○ ○ gpd m^3/hr ○		○ gpm cfs ○ ○ gpd m^3/hr ○
Please mark this circle if you copying this page for any additional CWIS ○						

17. (a) Has your vessel or its owner firm ever conducted or commissioned a study of the ecological or environmental effects of any of the vessel's intake structures, in particular, a study of the impingement or entrainment of fish and shellfish?

○ Yes (if "Yes," answer part (b) of this question)

○ No

(b) If you answered Yes, please provide the name of the most recent study completed. In addition, please provide the name and telephone number of the individual(s) we should contact if we require additional information regarding the study.

Name of Most Recent Study _____

Contact Name: _____

Telephone No: (_____) _____

STOP [End of Section C]

If your vessel's design intake flow (Question 7) was equal to or greater than 2 million gallons per day, you need not complete the next section, Section D, Facility and Firm Level Economic Data. Instead, you (or someone else in your firm) will complete the separate questionnaire, Industry Economic Questionnaire: Phase III Cooling Water Intake Structures - Seafood Processing Vessels.

If your vessel's design intake flow (Question 7) was less than 2 million gallons per day, continue to Section D.

Section D: Vessel and Firm-Level Economic Data

18. (a) Please report employment for the vessel in terms of *full-time equivalent employees (FTE)* for fiscal year 2002.

NOTE: *1 FTE equals 1 person-year or 2,000 hours. Include all full-time and part-time employees.*

FTEs in FY 2002: _____

(b) Please report revenues for the vessel in the last 3 fiscal years, using the table below.

NOTE*: If revenue at the level of the vessel is not available, indicate NA (for not applicable).*

DEFINITION: For the purposes of this questionnaire, total annual sales revenue is the total amount of money received by a firm from sales of its products and/or services over 365 days. The value does not include gains from investments or extraordinary gains, such as increases in owners' equity from capital adjustments or gains from the sale or exchange of assets.

Revenues for the Vessel (Report in whole dollars)			
	FY 2000	**FY 2001**	**FY 2002**
Total Revenues			

(c) Your fiscal years begin (for example, January 1)_____

The information in Question 18 is confidential business information (CBI). ○

19. (a) What is the complete legal name, mailing address, and primary SIC code for the *domestic parent firm* that owned the vessel as of December 1, 2002?

DEFINITION: For the purposes of this questionnaire, the domestic parent firm is the highest level of domestic business entity in the organizational structure. For example, if the company that owns the vessel is a wholly-owned subsidiary of another US company, the second company would be the parent firm (if it is not owned by another US company). A firm that is owned by another U.S. firm is not a domestic parent firm. A U.S. firm that is owned by a foreign firm is a domestic parent firm.

Name of Domestic Parent Firm:_____

Mailing Address/P.O. Box: _____

City, State, ZIP Code: _____

Primary SIC Code: _____

NOTE: *Please use the SIC codes contained in the Office of Management and Budget's 1987 Standard Industrial Classification Manual. These codes can also be found at the following Internet site: www.osha.gov/cgi-bin/sic/sicser5. If the primary line of business is seafood processing, the applicable SIC codes most likely are:*

2092 Prepared Fresh or Frozen Fish and Seafood
2077 Animal and marine fats and oils (canned, fresh, and frozen marine fats and oils)
2091 Canned and Cured Fish and Seafood

(b) Is the *domestic parent firm* owned by a foreign firm as of the last day of Fiscal Year 2002?

○ Yes (if "Yes," continue)

○ No (if "No," skip to Question 20)

Name of Foreign Ultimate Parent Firm: _____

Total Employment, in terms of full time equivalent employees (FTE): _____

NOTE: 1 FTE equals 1 person-year or 2,000 hours. Please include all full-time and part-time employees.

20. (a) Please complete the table below with the domestic parent firm's total employment, in terms of full-time equivalent employees (FTE), and total revenues. Include all full-time and part-time employees.

NOTE: *1 FTE equals 1 person-year or 2,000 hours.*

DEFINITION: For the purposes of this questionnaire, total annual sales revenue is the total amount of money received by a firm from sales of its products and/or services over 365 days. The value does not include gains from investments or extraordinary gains, such as increases in owners' equity from capital adjustments or gains from the sale or exchange of assets.

Consolidated Financial Information for the Domestic Parent Firm (Report monetary values in whole dollars)				
		FY 2000	**FY 2001**	**FY 2002**
(i)	Total Employment (FTE)			
(ii)	Total Revenues			

(b) This firm is reporting data for the fiscal years beginning _____/_____/_____ and ending _____ / _____ .

The information in Question 20 is confidential business information (CBI). ○

THANK YOU FOR COMPLETING EPA'S *INDUSTRY TECHNICAL QUESTIONNAIRE: PHASE III COOLING WATER INTAKE STRUCTURES–SEAFOOD PROCESSING VESSELS*. WE APPRECIATE YOUR COOPERATION. PLEASE RETURN THE QUESTIONNAIRE WITH A SIGNED CERTIFICATION STATEMENT IN THE ENVELOPE PROVIDED.

STOP-END OF SURVEY

Glossary to Questionnaire

NOTE: *The following terms are defined for purposes of this questionnaire only. The definitions at present do not have any legal meaning with respect to Section 316(b) of the Clean Water Act.*

Average Daily Intake Flow Rate: The total volume of cooling water withdrawn over an average 24-hour day.

Cooling Operations: Activities that transfer heat from one medium or activity to cooling water (with the exception of nonprocess air conditioning).

Cooling Water: Refers to both contact and non-contact cooling water, including water used for equipment cooling, and dilution of effluent heat content. Cooling water may be used for the cooling of engines and related parts, cooling of desalination equipment, cooling of fish freezing equipment, cooling of equipment used for cooking crab and shrimp or other. The intended use of the cooling water is to absorb waste heat rejected from the process or processes employed or from auxiliary operations on the vessel's premises.

Cooling Water Intake Structure (CWIS): The total structure used to withdraw water from a water source up to the point of the first intake pump or series of pumps. The intended use of the cooling water is to adsorb waste heat rejected from processes employed or from auxiliary operations on the vessel. If a vessel has intake structures that withdraw water for purposes in addition to cooling, the entire intake structure should be considered a cooling water intake structure.

Cooling Water System: A system that provides water to/from a vessel to transfer heat from equipment or processes therein. The system includes, but is not limited to, seachests, through-hull penetrations, simple pipes, pumps or other water intake structures. For vessels that use surface water for cooling, a system begins at the first barrier(s) to ingress and/or egress by fish and other aquatic wildlife (e.g., at the seachest screen) and ends at the discharge outlet(s). ***See also Cooling Water Intake Structure.***

Design Intake Flow: The total design capacity of the cooling water intake structures. A cooling water intake structure is an intake structure that withdraws any portion of water for cooling purposes, even if a large portion of that water is used for non-cooling purposes. For example, if an intake structure (e.g., seachest) has one or more lines and pumps withdrawing from it, some supplying cooling systems, and some not (e.g. fire mains), the capacity of all pumps withdrawing through the intake structure would be counted. If a fire main or a ballast tank is supplied through a separate intake structure that does not have any lines & pumps supplying cooling water, that capacity would not be counted.

Design Through-Screen Velocity: The value assigned during the design phase of a CWIS to the speed at which intake water passes through the intake screen (or other technology) against which organisms may be impinged or where they may be entrained.

Discharge: When used without qualification, means the discharge of a pollutant. Discharge of a pollutant means: (i) any discharge of any pollutant or combination of pollutants to waters of the United States from any point source, or (ii) any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. ***See also 40 CFR 122.2.***

Domestic Parent Firm: The highest level domestic business entity in a facility's organizational structure. A firm owned by another U.S. firm is *not* a domestic parent firm. On the contrary, a U.S. firm owned by a foreign firm *is* a domestic parent firm.

DUNS Number: A number assigned to a business using the Data Universal Numbering System (DUNS) developed by the Dun and Bradstreet Corporation.

Effluent: Outflow of wastewater from a vessel to waters of the United States.

Entrainment: The merging of small aquatic organisms with the flow of cooling water entering and passing through a cooling water intake structure, and, thus, into a cooling water system.

Estuary: A semi-enclosed coastal body of water that has a free connection with the open sea and is strongly affected by tidal action. In an estuary, sea water is mixed (and usually measurably diluted) with fresh water from land drainage. [**NOTE**: *The Chesapeake Bay and the San Francisco Bay are examples of estuaries even though the term **bay** appears in their name. For the purposes of this questionnaire, the term "tidal river" means the seaward most reach of a river/stream where the salinity is ≤ 0.5 ppt at a time of annual low flow its surface elevation responds to the effects of coastal lunar tides. Where the river salinity exceeds 0.5 ppt, the respective river reach will be viewed as estuarine.*]

Full-Time Equivalent Employee (FTE): The normalized unit for counting employees at a facility. One FTE equals 2,000 hours of work (8 hours per day for 250 days) during a calendar year. As such, two part-time employees, each working 1,000 hours per year, would be counted together as one FTE.

Impingement: The trapping and holding of larger aquatic organisms to the outer part of an intake structure or against screening devices during periods of cooling water withdrawal.

Intake Screen System: Devices placed at or near the opening of an intake structure to mechanically stop debris and/or organisms from entering a vessel's water system.

Intake Structure: ***See Cooling Water Intake Structure.***

Latitude: The angular distance north or south of the equator measured in degrees or in hours, minutes, and seconds along a meridian.

Longitude: The angular distance on the earth east or west of the prime meridian, expressed in degrees or in hours, minutes, and seconds.

Non-Contact Cooling Water: Cooling water that does **not** come into contact with any raw materials, intermediate products, finished products, by-products, or waste products.

North American Industrial Classification System (NAICS): A new system initiated in January 1997 to classify industries. This new system replaces the existing Standard Industrial Code (SIC) system and identifies industries according to the type of production activities performed. NAICS industries are identified using a 6-digit code.

NPDES (National Pollutant Discharge Elimination System) Permit: A permit required to be held under Section 402 of the Clean Water Act (33 U.S.C. 1342 *et seq*.) by any point source discharging pollutants to waters of the United States. Permits may address effluent discharges, storm water, or sewage sludge management practices and may be issued by an EPA Region or a Federally-approved State NPDES program.

Ocean: Marine open coastal waters other than those water bodies classified as estuaries, embayments or fjords, each of which are semi-enclosed and have readily identifiable geographic boundaries.

Operating Days: The total number of days (1 day = 24 hours) a cooling water intake structure operated during a specified time period, excluding any days the cooling water intake structure was offline for routine maintenance or otherwise was not operational. A partial day (i.e., operations of less than 24 hours) does not constitute an operating day and should not be counted as such.

Passive Intake System: Devices placed at or near the opening of an intake structure that, with little or no mechanical activity, stops debris and/or organisms from entering a plant's water system. Most passive intake systems achieve very low withdrawal velocities at the screening medium.

Point Source: Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. The term does not include return flows from irrigated agriculture or agricultural storm water run off. ***See also 40 CFR 122.2.***

Presently Operating: Cooling water systems that are currently in commercial service.

Process Operations: Industrial activities that directly result in the production of a vessel's primary output.

Production Line: Each of the successive steps taken on a vessel to produce a product.

Revenues: The total amount of money received by a firm from sales of its products and/or services, gains from the sales or exchange of assets, interest and dividends earned on investments, and other increases in the owner's equity except those arising from capital adjustments.

Standard Industrial Classification (SIC) Code: A national classification system that organizes business entities into production-based and market-based categories identified by a 4-digit code. There are three levels of SIC codes: primary, secondary, and tertiary. Primary SIC codes are assigned based on the principal product or group of products produced or distributed by an establishment or for services rendered by the facility. Additional SIC codes are assigned for any secondary and tertiary products produced or for services rendered by an establishment.

Surface Water: Bodies of water including lakes, ponds, or reservoirs; non-tidal rivers or streams; tidal rivers; estuaries; fjords; oceans; and bays/coves.

Offline: Cooling water systems that are presently out of commercial service but are expected to return. The category includes systems on inactive reserve and systems deactivated (i.e., systems not normally used but available for service).

Typical Calendar Year: A year in which the facility and its cooling water intake structures are operated in a normal, routine, regular, or otherwise standard fashion.

Water Body: Any number of potential sources of intake water for cooling water intake structures. Includes municipal water sources, ground well water, oceans, lakes, reservoirs, rivers, and estuaries.

Waters of the United States (U.S.): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Waters of the United States include, but are not limited to, all interstate waters and intrastate lakes, rivers, streams (including intermittent streams), mudflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The definition includes waters which are or could be used by interstate or foreign travelers for recreation or other purposes and those waters from which fish or shellfish are or could be taken and sold in interstate or foreign commerce or which are used or could be used for industrial purposes by industries in interstate commerce. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA are **not** waters of the U.S. ***See 40 CFR 122.2 for a more complete definition.***