Inland Waterways Audit Techniques Guide

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Preface

The purpose of this Audit Technique Guide is to provide guidance on conducting excise tax inland waterway examinations. It incorporates procedures and techniques that have been shown to be practical or unique to this type of case. The guide should be used in conjunction with the examiner’s judgment, skill, and experience to complete the examination within the shortest possible time with the least burden possible to the taxpayer. Use of these techniques does not imply that the object of the examination is to find a deficiency, but rather to determine whether the inland waterway tax and other fuel tax credits reported on Form 720 have been accurately reported.

Because the facts and circumstances of each taxpayer are unique, the procedures applied will be slightly different in every examination, and the strategy will remain dynamic. The examiner will combine the techniques that apply to each specific case and apply his or her basic knowledge to the practical situation at hand.

Appropriate project and tracking codes should be used when warranted. Feedback sheets should be completed and forwarded at the conclusion of an examination when requested in relation to strategy initiative.

Normal package audit requirements and case closing procedures must also be followed when working inland waterway cases.

Remember that all excise tax case examination must be established on ExTac.
Chapter 1 - Overview of the Inland Waterway Industry

I. General

The inland waterways of the United States constitute a 25,000 mile shallow-draft waterways system, 12,000 miles of which constitutes the taxable Inland Waterways, and figures prominently in servicing America’s basic industries, such as: mineral mining, coal mining, agriculture, stone/clay/glass manufacturing, food products, lumber and wood, primary metal industries, paper and allied products, petroleum and chemical products, cement and asphalt. A U.S. Department of Transportation analyst stated that “barge shipping is by far the most energy-efficient freight mode, extremely safe, causes little congestion, produces little air/noise pollution and has minimal land/use social impact.” The ability to haul massive quantities of raw materials at low costs is the main appeal of the waterways system. The waterways constitute a network of trade by which states “export” their products to other states on the river system and “import” goods via the same water highway.

The inland waterway system includes waterways in the following states: Alabama, Arkansas, Florida, Georgia, Illinois, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia, and Wisconsin. However, keep in mind that all states are impacted by the Inland Waterways System.

II. Economic Impact

The ports and waterways infrastructure is vital to our Nation's economy, environment, and quality of life. Waterways provide the most inexpensive, energy-efficient mode of transportation, and they are the lifelines to foreign markets. As the importance of international trade grows, so does the value of waterborne commerce to our country and its future.[1] Efficient transportation via the inland waterways system assists this nation’s businesses in staying competitive with producers overseas.

The value of the goods exchanged between states using the waterways exceeds $100 billion annually.[2] Inland waterway transportation supports approximately 70,000 jobs in water transportation and approximately 800,000 jobs in industries, which originate or receive barge-oriented commodities in counties adjacent to the waterways. 2 River states represent 54 percent of the population, 49 percent of the Gross Domestic Product, 49 percent of federal tax revenues, 56 percent of heavy manufacturing, and 61 percent of agricultural jobs.[3] The inland water transportation industry generates millions of dollars in payroll taxes for both Federal and State governments. The industry has contributed nearly $1.6 billion in fuel tax revenues to the Inland Waterways Trust Fund since its inception in 1986. Interest on these monies has added another $302 million to the Trust Fund, which pays 50 percent of the cost of construction and major rehabilitation projects on the inland waterways system.[4]
III. Reporting Requirements

Tax on fuel used in commercial inland waterway transportation is imposed on any liquid used during any calendar quarter by any person as a fuel in a vessel in commercial waterway transportation.

Tax rates vary depending upon the period of fuel usage.

Treasury Regulations provide that a return filing must be made on Form 720, Quarterly Federal Excise Tax Return, according to the instructions applicable to the form. The requirement for filing a return applies separately to each tax listed by IRS Number on Form 720. An entry must be made on the line for the IRS Number in order to file a return of the tax corresponding to that number. Inland waterway tax is reported on the line representing IRS No. 64. Effective January 1, 2008 the Leaking Underground Storage Tank tax may also apply for certain types of fuel usage. If applicable the LUST tax is reported on IRS No. 125. In such situations, both IRS No. 64 and 125 will be used to report tax.

Treasury Regulations provide for an exemption to the deposit requirements. Under this exemption, no deposits are required in the case of the taxes imposed by section 4042 (relating to fuel used on inland waterways).

See Chapter 5 for a more in-depth discussion of law.

IV. Industry Organizations and Trade Associations

As part of the National office “Area Compliance Enhancement” (ACE) effort, everyone is responsible for learning and understanding all industries that impact Excise taxes. In an effort to understand the Inland Waterway Industry, it is important to gather general and specific knowledge from all sources possible. The following agencies have been identified as useful sources of information to better understand the industry. If information is needed from any of these agencies contact the Excise Industry Specialist group. Note -This listing is not all-inclusive.

- U.S. Army Corps of Engineers, Various Divisions
- United States Coast Guard, Various Regions
- United States Customs Service, Various Regions
- National Waterways Conference, Inc., Washington D.C.
- Inland Rivers, Ports & Terminals, Inc., Jackson, MS
- Inland Waterways User Board, Washington D.C.
- EPA –(Profile of the water transportation industry)
- U.S. Department of Commerce; National Oceanic and Atmospheric Administration
  National Ocean Service Coast Survey (creates charts and publications)
- State Department of Transportation, Waterborne Movement
- Local Port Authorities

V. Useful Internet Sites
U.S. Corp of Army Engineers Navigation Information Connection – Vessel locations, lock conditions, river conditions, etc.

American Association of Port Authorities - Glossary of shipping terms.

The Waterways Journal - Lists steam and diesel vessels operated on the Mississippi River System and Gulf Intracoastal Waterway and Tributaries.
Chapter 2 - Pre-Audit Analysis

I. Pre-Audit Planning

The case assigned to you will normally have some information such as charge out labels and transcripts in the file. However, other information may be available to the examiner prior to contact with the taxpayer. Analysis of this information can provide valuable insight into the taxpayer’s business operations and help with determining the scope and depth of the exam.

A. Integrated Data Retrieval System (IDRS) Research

Conduct an in-depth review of IDRS to learn about the entities’ background including its filing, deposit, and payment history for all federal tax requirements. IDRS will also reflect the entities’ credit history in situations when taxable fuels have been used.

B. Information Document Request (IDR)

The IDR should be concise and list the records needed to ensure that the taxpayer’s return has been correctly filed. The IDR should be limited to requests for documents only. Questions about the taxpayer’s business operations should generally not be included on the IDR. Note that not all of the items listed should be requested in every case. Issue follow-up IDRs as needed throughout the audit. Also note that regulations require that specific records are required to be maintained by operators of vessels used in commercial waterway transportation.

- Ship log (Boat log) This required record (by the U.S. Coast Guard) should be available for each vessel operated. A daily record of boat activities such as; movement, fueling, river position, time of travel, lock activity, repairs, cargo loading and unloading. This is a primary audit tool that should be requested on each audit.
- Vessel manifest (will reveal the vessel number/name, size, length, engine horse power etc.) This information will give the agent a feel for the number of vessels and their relative fuel use.
- State Motor fuel tax return (if available in that state/district). This record will detail dyed fuel purchases and can be reconciled to the taxpayers’ fuel use records, to test them for accuracy.
- Fuel purchase invoices (this record should be used to reconcile fuel purchased with fuel used during the audit period)
- Maintenance records (many used as a source for leads, since the taxpayer may also maintain vessels for other entities). (Engine room log)
- Manufacturers “specs” record. This record, which is published by the diesel engine manufacturer, details the manufacturer’s professional position detailing the “gallons per hour” that the diesel engine could burn during normal operations. This record will most likely be used by the taxpayer to calculate its non-taxable fuel usage. This “specs” record should be used to test or evaluate the “reasonableness” of the taxpayer’s calculations regarding non-taxable fuel use.
• Power take-off (engine generator) fuel use record. Most towing companies will detail non-taxable use of the electric on board generator in this record. Other non-propulsion fuel use will also be detailed in this record.

• Lock pass through record. These records can be obtained from the lock master (U.S. Corps of Engineers) at the specific locks that the vessels pass through. These records can help substantiate the taxpayer boat/ship logs.

• Waterway user boat operation report for federal excise tax
  Some larger towing companies may prepare a detailed fuel operating report that is usually indexed by vessel number. This report will detail vessel operating hours, non-taxable fuel use (on-board generators), taxable (propulsion on the inland waterway) use, and other detailed fuel use information. Percentages of taxable and non-taxable fuel use, calculated by the taxpayer will appear on these records. Agents must review these percentages for “reasonableness”. These records often will become very important in determining federal excise tax.

• Operating contracts with State and Local waterway authorities or the United States Army Corps of Engineers that will specify fuel delivery and/or federal excise tax responsibility during contract specific projects. These contracts should be reviewed as they may indicate the Excise tax responsible party for river projects that involve taxable inland waterway use. They may involve bridge support maintenance, dredging, or major waterway construction and/or maintenance contracts.

C. Initial Interview Questions

Generate a questionnaire to send out with appointment letter. Interview questions are designed to help the agent better understand the taxpayer’s business. Once the interview is over the agent should feel that he/she has a good understanding of the business operations. Questions should focus on how the taxpayer arrived at the reported tax (if a form 720 has been filed). See attached questionnaire.

D. Internet Research

Conduct Internet research on the taxpayer assigned to find out as much information as possible concerning the taxpayer’s business operations. Chapter 1 (V) lists some of the Internet sites that relate to inland waterways. General search engine site may also help locate websites specific to the taxpayer under audit. Many Internet sites list such information as the number of vessels operated by specific entities along with their areas of operation. This information may prove useful for comparison with the taxpayer’s vessel log books.
Chapter 3 Examination Techniques

I. Initial Interview

The initial interview is an important element of any examination, setting the stage for the rest of the examination. The primary purpose of the interview is to secure, by conversation with the taxpayer, sufficient facts that will present the overall financial picture, an understanding of the operations, and an overview of the recordkeeping practices. This is the examiner’s chance to learn exactly how the business works. Information provided during the initial interview can save significant time and effort in unnecessary examination steps. The interview is the best opportunity to allow the taxpayer to provide information not shown on the return.

In addition to the general interview items usually covered, specific questions relating to the inland waterway business should also be included. Some of the items to be developed in the initial interview:

A. Review questionnaire with appropriate personnel

Review questionnaire with the person who prepared the questionnaire and the return.

B. Tour of the business

A tour of the taxpayer’s business premises should be conducted. An inspection of an actual vessel(s) may be warranted and should be conducted on a case-by-case basis.

C. Expand or limit interview

Expand or condense interview as needed, other excise tax issues may exist such as communications, foreign insurance, vessel registration and identification requirements, barge off-loading tracking issues, etc.

II. Examination of Records

Review types of records that are relevant to the taxpayers operations. Refer to Section I. C. “Information Document Request” for the types of records that might be requested during the examination. Keep in mind that types of accounting systems vary among taxpayers. In some instances taxpayers may use sophisticated computer accounting program that allow for the production of very detailed reports. Others may maintain financial accounting records manually.
A. Review responses to questionnaire and initial interview

Responses provided from a review of the questionnaire and other responses provided by the taxpayer during the initial interview may result in the identification of issues that may scope the depth of the examination.

B. Reconcile Books and Records to Form 720

Thoroughly review all records used by taxpayer to prepare Form 720. This normally includes vessel log books and workpapers to calculate taxable waterway fuel usage and generator usage and the amount of fuel used that was purchased subject to federal excise motor fuel tax. Key issues to consider while performing the reconciliation:

- Compare taxable waterway usage with other sources of waterway usage identified from third party and other sources.
- Note reason(s) for purchase of tax-paid fuel.
- Identify sample selection of vessel activity.
- Note claim amounts and match to IDRS. Credit amounts may post to MFTs 02, 03, or 40, so be sure to inspect each MFT postings.

C. Examine vessel logs

Each entity that operates vessels on taxable waterways are required to maintain records sufficient to establish to the satisfaction of the Commissioner the amount of fuel used for taxable purposes. Those records may include, when relevant to establish liability:

- Quantity of fuel and date of acquisition of all liquid fuels acquired for both taxable and nontaxable purposes, whether delivered to storage tanks or tanks on a vessel;
- Date and quantity of fuel pumped into tanks on each vessel;
- Identification number or name of each vessel using fuel; and
- Departure time, departure point, route traveled, destination, and arrival time for each vessel.

Because of the above requirement, it is imperative that the examiner thoroughly review vessel logs. The number of log books reviewed will depend upon the number of vessels operated by the entity under exam and the volume of entries entered into each log. Therefore, sampling procedures may be warranted when reviewing log books. It may be necessary to ask the taxpayer for an explanation of entries recorded in the logs.

A review of vessel logs should focus on vessel locations of operation and the time of operation on taxable waterways. This focus must be conducted with the understanding that the vessel’s log is the primary record source for determining tax liability.
D. Review generator specification

Many vessels use generators to provide power for on-board usages such as lighting, cooling and heating. Section 48.4042-2(a)(2) of the Manufactures and Retailers Excise Tax Regulations provide that if the liquid fuel consumed by a nonpropulsion engine is drawn from the same tank as fuel consumed by a propulsion engine, a reasonable determination of the quantity of fuel used in such a separate engine will be acceptable for purposes of excluding from taxation a portion of the fuel consumed by the vessel. The determination of the amount of fuel consumed by the nonpropulsion engine may be based primarily on the operating experience of the person using the fuel; however, in order to exclude fuel from taxation under these rules, the taxpayer must maintain records which will support the allocation used.

The amount excluded by the taxpayer for nonpropulsion engines (generators) may be easy to identify if the generators are metered to show fuel usage and the taxpayer maintains a log of meter readings. In cases where generator usage is not metered, other means to determine usage must be used. Consequently, it may be necessary to request and review generator specifications to determine the fuel usage. This may be accomplished by reviewing the manufacturer’s fuel usage information which is normally expressed based on an hourly usage measurement.

E. Examine fuel purchase invoices

Many vessels that operate on taxable waterway use dyed diesel fuel. One reason that dyed diesel fuel is preferred is because it is taxed at a much lower federal excise tax rate than undyed diesel fuel. Prior to October 1, 2005, dyed diesel fuel was not subject to federal excise tax. Effective October 1, 2005, the Leaking Underground Storage Tank tax of $0.001 per gallon is imposed on dyed diesel fuel under section 4081. Undyed diesel fuel is taxed at $0.244 per gallon under section 4081.

If the taxpayer uses undyed diesel fuel in any off-highway business use (including use in commercial vessels or in their separate engines that operate separate generators) the taxpayer is eligible for a credit or payment of the amount of tax imposed on the undyed diesel fuel (other than the LUST tax). Thus, in 2008, the amount of credit or payment is $.243 per gallon.

If the taxpayer is claiming a credit or payment related to its off-highway business use of undyed diesel fuel, purchase invoices and bills of lading must be requested to verify that the fuel was indeed subjected to tax.

F. Examine contracts and lease agreements

Many vessel operators provide transportation services under contract or lease agreements. As with all contracts the terms will vary. For purposes of determining the party liable for inland waterway tax in such situations, the person that actually operates the vessel is liable for tax even though such person may not be responsible for control and direction of the vessel or pay for fuel expenses. This distinction is necessary in situations when the lessor (vessel operator) and the lessee (barge operator and/or the owner of the product being transported) are different. For example, a tugboat operator may be contracted to push a barge loaded with fuel from Houston to
Florida. The barge may or may not be owned by the owner of the fuel. The terms of the contract stipulate that the (lessee) fuel/barge owner will have control over the route, timing, fueling, and destination of the fuel.

This interpretation is also necessary in what industry refers to as a “fully found agreement” which is generally a contractual agreement in which the lessor (owner of the vessel) pays operating expenses such as salary for the crew (including captain), insurance, and other seaworthiness expenses and the lessee (person renting the vessel) pays only for the fuel.

Another type of lease agreement is referred to in industry as a “bareboat agreement”. A bareboat agreement is generally a contractual agreement in which the lessor (owner of the vessel) does not pay operating expenses. The lessee (person renting the vessel) pays all expenses such as, the salary for the crew and captain, insurance and other seaworthiness expenses, including the fuel taxes.

Contracts may be examined to reveal the locations of operation which can in turn be compared with vessel logs to identify and confirm taxable waterway usage.

G. Tax Computations

The general formula for computing inland waterway tax and generator usage credit is expressed in this example:

Total gallons of diesel fuel used in the propulsion engine of vessels engaged in taxable waterway transportation | 85,000
---|---
Less: Generator hourly usage of fuel – Drawn from the same tank as the vessel | 12,875
Taxable gallons | 72,125
Multiplied by Inland waterway tax rate (2008) | $0.20
Inland waterway tax to be reported on IRS #64 Form 720 | $14,425

The general formula for computing credit for use of federal excise paid motor fuel tax is expressed as follows:

Gallons of undyed diesel fuel purchased with federal excise motor fuel tax (9,000 of the 85,000 gallons reflected in the above example) * | 9,000
Multiplied by undyed diesel fuel tax rate | $0.243
Total claim to be requested on Form 720, Sch C line 3a. | $2,187

* Gallons may also be from taxed fuel used in generators with separate tanks.

If some of the taxpayer’s vessels use Bunker fuel (a liquid not taxed under IRC 4041 or 4081), the taxpayer must also report as follows:

Gallons of Bunker fuel used in the propulsion engine of vessels engaged in taxable waterway transportation. * | 25,000
<table>
<thead>
<tr>
<th>Multiplied by the LUST tax rate</th>
<th>$0.001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total LUST tax to be reported on Form 720, IRS No. 125</td>
<td>$25</td>
</tr>
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* Note that **any liquid** fuel used in the propulsion engine of a vessel is subject to tax.

As previously discussed, taxpayers may use a variety of methods to maintain records and to compute tax. An alternative method for the taxpayer is to only track nonpropulsion usage. This amount is subtracted from total fuel usage the result of which represents taxable fuel usage.

In any event, the taxpayer fuel purchase journal should be examined to determine such information as the names of fuel suppliers; the amounts of fuel purchased; and to determine the basis for any invoice and bill or lading sampling. An examination of fuel inventory and storage records will also be necessary to determine the relationship between fuel purchases and taxable usage.

Review the Forms 4136, 8849 and Form 720, Schedule C to ensure proper reporting of credits.

Credit amounts should not be used to reduce the amounts of inland waterway tax required to be reported on Form 720, Line 64. This method is sometimes referred to as taking a blind credit.
Chapter 4 - Potential Audit Issues

I. Common Inland Waterway Issues

A. Incorrect classification of vessel usage

Underreporting/Overreporting of vessel usage on taxable inland waterways. Causes will vary but may include failure to recognize that some taxable waterways include the main channel, all alternate channels, and all adjoining bays and sounds, regardless of depth. This issue applies to both the Atlantic and Gulf Intracoastal Waterways.

B. Voyages crossing boundaries of the specified waterways

Fuel consumed by a vessel traveling along the specified waterways is taxable only to the extent of fuel consumed for propulsion while on the specified waterways. Generally, the operator may calculate the amount of fuel consumed while on the specified waterways during a particular voyage by multiplying total fuel consumed in the propulsion engine by a fraction. The numerator of the fraction is the time spent operating on the specified waterways; the denominator is the total time spent operating on the specified and nonspecified waterways during the voyage. This calculation may not be used when it is unreasonable. It may be determined to be unreasonable by:

1. Better evidence of fuel consumed (e.g., readings from an accurate fuel gauge or records from similar voyages); or
2. The existence of factors causing a substantial discrepancy between the rate of fuel consumption on the specified and nonspecified waterways.

C. Incorrect allocation of generator usage

Overstated/Understated gallons of fuel claimed for allocation generator usage in cases when generators are supplied from the same tank as the vessel’s propulsion tank.

When the propulsion engine operates special equipment by means of a power take-off or power transfer, the tax applies to all liquid fuel consumed by that engine. For example, the tax applies to all fuel used in the engine operating an alternator, a generator, or pumps, if that engine is used to generate movement of a vessel.

D. Incorrect determination of person liable for tax

This issue is common in contract situations when the vessel operator leases the vessel under a fully-funded agreement. In such situations, the actual operator of the vessel is liable for tax even though the lessee may exercise the scope of control and direction of the vessel’s movement.
E. Overstated/Understated motor fuel tax credit

Taxpayer may overstate or understate claim for refund of federal excise tax paid on taxable fuels used in the propulsion engine of vessels on taxable inland waterways.

F. Special claim for refund of second LUST tax

As a result of the Tax Technical Corrections Act of 2007, inland waterway vessel operators who paid the LUST tax under IRC 4042 and 4081 may file for refund of the 4042 tax. In most instances, the amount of the tax imposed under IRC 4081 will have been paid to the inland waterway user’s supplier for undyed diesel fuel. However, the LUST tax imposed under IRC 4042 should have been paid by the inland waterway vessel operator on its Form 720 IRS No. 64. These should generally be one time claims filed on Form 8849 but may also be claimed on Form 720 and 4136. Gallons used during the period beginning October 1, 2005 through December 29, 2007 may be claimed. Special filing instruction apply to this type of claim.

G. Failure to file

In some instances, the examiner may receive lead information on a taxpayer that has not filed Form 720. In such instances, the examiner will follow substitute for return or delinquent return procedures as outlined in IRM 4.24.11.9.2 and 4.24.11.9.3. Substitute for return procedures apply when all efforts have been exhausted to secure a return from a taxpayer.

The examiner may also encounter instances in which the taxpayer timely files Form 720 to report tax under IRS No. 64 but fails to file under IRS No. 125. In this instance, follow normal procedures for working multiple IRS activities.

II. Related Excise Tax, Registration and Penalty Issues

Tax Issues

Tax is imposed on the owner of taxable fuel upon the removal or entry of such fuel into a vessel that is not operated by a taxable fuel registrant. If a vessel operator is not registered in accordance with IRC section 4101, and taxable fuel is the products that is being transported, try to determine the owner of the fuel if different from the vessel operator. Make a referral on Form 5346, Examination Information Report, based on the name and address of the owner of the fuel. See penalty issues below for addressing the vessel operator’s failure to register.

Registration Issues

Treasury Regulations 48.4101-1(c)(1)(vii) provides that a person is required to be registered under IRC section 4101 if the person is a vessel operator.
A vessel operator is defined in Treasury Regulations §48.4101-1(b)(8) as any person that operates a vessel within the bulk transfer/terminal system. However, for purposes of this definition, vessel does not include a deep draft ocean-going vessel.

Penalty Issues

Under Internal Revenue Code section 6719 a penalty of $10,000 for the initial failure plus $1,000 for each day thereafter for any person who fails to register or reregister in accordance with IRC section 4101.

Vessel operators are required to file Form 720-CS, Carrier Summary Report, when removing or delivering products to IRS approved terminals. Penalties for failure to file Form 720-CS are imposed under IRC section 6725.
Chapter 5 - Law

Tax on Fuel Used in Commercial Transportation on Inland Waterways

Update:

The Tax Technical Corrections Act of 2007, Public Law 110-172, provides that a refund is available for the second Leaking Underground Storage Tax (LUST) tax imposed on diesel fuel, gasoline, or kerosene used in taxable inland waterway transportation. Inland waterway filers that reported tax on Form 720, IRS No. 64 for the period October 1, 2005 through December 29, 2007 may file for refund of the LUST tax for gallons used to power vessel operating on taxable inland waterways during this period.

Form 720 has been revised to include new IRS No. 125. IRS No. 125 is used to report LUST tax on fuels that have not been subjected to the LUST tax imposed under IRC 4041 or 4081.

Internal Revenue Code

SEC 4041(d) In General –

There is hereby imposed a tax of 0.1 cent a gallon on the sale or use of any liquid (other than liquefied petroleum gas and other than liquefied natural gas) if tax is imposed by subsection (a)(1) or (2) on such sale or use.

SEC. 4042(a) In General.-

There is hereby imposed a tax on any liquid used during any calendar quarter by any person as a fuel in a vessel in commercial waterway transportation.

4042(b) Amount of Tax.-

4042(b)(1) In general. - The rate of the tax imposed by subsection (a) is the sum of -

4042(b)(1)(A) the Inland Waterways Trust Fund financing rate,

4042(b)(1)(B) the Leaking Underground Storage Tank Trust Fund financing rate, and

4042(b)(1)(C) the deficit reduction rate.

4042(b)(2) Rates. - For purposes of paragraph (1)-

4042(b)(2)(A) The Inland Waterways Trust Fund financing rate is the rate determined in accordance with the following table:
If the use occurs: gallon is:

After 1994 20 cents

4042(b)(2)(B) The Leaking Underground Storage Tank Trust Fund financing rate is 0.1 cent per gallon.

Note – As mentioned in the update above, the tax imposed under 4042(b)(2)(B) shall not apply to the use of any fuel if tax was imposed with respect to such fuel under section 4041(d) or 4081 at the Leaking Underground Storage Tank Trust Fund financing rate.

4042(b)(2)(C) The deficit reduction rate is:

4042(b)(2)(C)(i) 3.3 cents per gal. after December 31, 2004, and before July 1, 2005,

4042(b)(2)(C)(ii) 2.3 cents per gal. after June 30, 2005, and before January 1, 2007, and

4042(b)(2)(C)(iii) 0 after December 31, 2006.

4042(b)(3) Exception for fuel taxed under section 4041(d). - The Leaking Underground Storage Tank Trust Fund financing rate under paragraph (2)(B) shall not apply to the use of any fuel if tax under section 4041(d) was imposed on the sale of such fuel or is imposed on such use.

4042(b)(4) Termination of leaking underground storage tank trust fund financing rate. - The Leaking Underground Storage Tank Trust Fund financing rate under paragraph (2)(B) shall not apply during any period during which the Leaking Underground Storage Tank Trust Fund financing rate under section 4081 does not apply.

Exemptions. -

4042(c)(1) Deep-draft ocean-going vessels. - The tax imposed by subsection shall not apply with respect to any vessel designed primarily for use on the high seas which has a draft of more than 12 feet.

4042(c)(2) Passenger vessels. - The tax imposed by subsection (a) shall not apply with respect to any vessel used primarily for the transportation of persons.

4042(c)(3) Use by state or local government in transporting property in a state or local business. - Subparagraph (B) of subsection (d)(1) shall not apply with respect to use by a State or political subdivision thereof.
4042(c)(4) Use in moving lash and seabee ocean-going barges. The tax imposed by subsection (a) shall not apply with respect to use for movement by tug of exclusively LASH (Lighter-aboard-ship) and SEABEE ocean-going barges released by their ocean-going carriers solely to pick up or deliver international cargoes.

Treasury Regulations

Treasury Regulation section §48.4042-1 (Tax on fuel used in commercial waterway transportation) contains provisions for the following:

a. Imposition of tax,
b. Amount of tax,
c. Person liable for tax,
d. Time of use,
e. Liquid fuel,
f. Commercial waterway transportation, and
g. Specified waterways

Treasury Regulation section §48.4042-2 provides special rules for the following:

a. Dual use of liquid fuels,
b. Voyages crossing boundaries of the specified waterways, and
c. Records required.

Treasury Regulation §48.4042-3 provides exclusions of certain types of waterway transportation.
Glossary

The definitions listed below can be found in IRC 4042(d) and (e).

**Commercial waterway transportation.** - The term “commercial waterway transportation” means any use of a vessel on any inland or intracoastal waterway of the United States -

- in the business of **transporting property** for compensation or hire, or
- in transporting property **in the business of the owner**, lessee, or operator of the vessel (other than fish or other aquatic animal life caught on the voyage).

**Inland or intracoastal waterway of the united states.** - The term “inland or intracoastal waterway of the United States” means any inland or intracoastal waterway of the United States which is described in section 206 of the Inland Waterways Revenue Act of 1978. See Treasury Regulations §48.4042-1(g).

**Person.** - The term “person” includes the United States, a State, a political subdivision of a State, or any agency or instrumentality of any of the foregoing.

**Date for Filing Return.** - The date for filing the return of the tax imposed by this section for any calendar quarter shall be the last day of the first month following such quarter.

**Other Terms**

(All terms below are industry terms unless otherwise noted)

**All Clear** – Tow boating term meaning that boat and/or tow is clear of obstructions.

**Amp Reading** - Taken from the engine room log, the amp readings should be recorded several times a day. The amp reading can be converted by a standard formula to kilowatts which can then be related, based on the manufacturer’s specifications, to the fuel consumed by the generator per hour.

**An Easy Distant Off** - Maintain a comfortable distance off the bank. (Maintain adequate room for maneuvering)

**Arrival Post** – A signboard approximately one mile above and below the lock.

**Atlantic Intracoastal Waterway** - Is defined to include the main channel, all alternative channels, and all adjoining bays and sounds, regardless of depth. See Treas. Regs. 48.4042-1(g)(6).
Ascending – Going upstream against the current.

Auxiliary Lock – A smaller secondary lock adjacent to the main lock.

Bar – Sand or gravel deposits in or near the channel.

**Bareboat Agreement:** Generally, a contractual agreement in which the lessor (owner of the vessel) does not pay operating expenses. The lessee (person renting the vessel) pays all expenses such as, the salary for the crew and captain, insurance and other sea worthiness expenses, including the fuel taxes.

Barge - A category of vessel designed as non-self-propelled units for the carriage of cargo on the weather deck or in holds or in tanks. The units are towed/pushed by another ship (tug or pusher vessel).

Bow – Front of barge or boat.

Break up Tow – To disassemble tow (take apart).

**Chem Barge** (liquid cargo) – Used to transport chemicals and oil.

**Coast Guard Number** - The official number assigned to a particular vessel by the U.S. Coast Guard at the time of registration by the Coast Guard. This number is normally retained by a vessel throughout the life of the vessel.

**Commodity Descriptions** - The first two digits of the Waterborne Commerce Statistics Center (WCSC) publication codes correspond with the Lock Performance Monitoring System (LPMS) commodity codes. Both LPMS and WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, Rev. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports as well as with commodity movements of other countries.

Cover Barge - A barge having hatch covers over its compartments and used for various dry bulk cargoes that need weather protection such as grain, tinplate, paper, etc.

**Deep-Draft Ocean-going Vessels** – (Explanation below is from Treasury Regulations §48.4042-3)

*In general.* - Under section 4042(c)(1), there is no tax imposed by section 4042(a) if: the vessel was designed primarily for use on the high seas; and

(ii) the vessel has a draft of more than 12 feet on the voyage for which the fuel tax exclusion is sought (e.g. 12 feet 1 inch).
Meaning of “designed primarily for use on the high seas.” - Section 4042(c)(1) requires a determination of the primacy of the design features rendering the vessel useful for service on the high seas, as opposed to the features which render the vessel useful for service on all less turbulent waters. Thus, whether a ship is “designed primarily for use on the high seas” must be determined from all the facts, including structural features and equipment. If the predominant use of a vessel is on the high seas, it shall be presumed to be “designed primarily for use on the high seas.” If the predominant use of a vessel is on waters other than the high seas, it shall be presumed not to be “designed primarily for use on the high seas.”

Meaning of “high seas.” - For purposes of this section, “high seas” shall mean waters other than the territorial waters of the United States or any other country. Thus, the high seas shall not include the internal waters of any country, the Great Lakes, harbors, or narrow coastal indentations.

Twelve foot draft

Definition. For purposes of section 4042(c)(1), “draft” shall mean the maximum vertical distance between the mean water line and the bottom of the keel. In cases where a vessel has a skeg or other appendage extending locally below the line of the keel, the draft shall be measured from the deepest appendage. A separate determination of draft must be made for each voyage when the vessel has its greatest load of cargo and fuel. For purposes of this determination, the term “voyage” means a round trip voyage. Therefore, if a vessel travels into the specified waterway system to pick up cargo and has a draft sufficient to qualify for the exclusion when loaded, then for purposes of section 4042(c)(1) the vessel satisfies the 12 foot draft requirement for the entire voyage. Similarly, if a vessel loaded with cargo travels into the specified waterway system with a draft sufficient to qualify for the exclusion provided by section 4042(c)(1), then the fuel consumed on the entire voyage may be excluded, regardless of the vessel's draft after the cargo is unloaded.

Double Lockage - When a towboat with barges must breakup the tow, and push half of the tow into the lock chamber, lock that part through and then enter the remaining barges with the towboat.

Draft – The number of feet between the water line and the bottom of the vessel. Example: The barge has an eight foot draft. Maximum vertical distance between the mean water line and the bottom of the keel. (Taxability could depend on the load in the vessel)

Dry Dock – A large platform capable of lifting a vessel out of the water for repairs and maintenance.

E.T.A. - Estimated time of arrival.
**Fully Found Agreement** – Defined in general as, a contractual agreement in which the lessor (owner of the vessel) pays operating expenses such as salary for the crew (including captain), insurance, and other sea worthiness expenses and the lessee (person renting the vessel) pays only for the fuel.

**GPM** – Gallons per minute.

**Gage (Gauge)** – A scale graduated in tenths of a foot which indicates the water level or river Stage.

**Generator Fuel Rate** - The rate of fuel the generator uses in an hour.

**Generator Operating Hours** – The number of hours the generator is used per month/day/week.

**Generator Fuel Exclusion** – The number of gallons of fuel that are exempt from tax due to usage in the generators. (*Note: This is only calculated when the propulsion engines and the generators are pulling fuel from the same tank)*

**Grass Line** – Manila or natural rope of any description.

**Guard Wall** – The riverward wall of a lock that prevents boats from being drawn into the dam.

**Guide Wall (Long-Wall)** – To assist pilots in tow alignments prior to lock chamber entry and is at least as long as the lock chamber.

**Handy Line (Heaving line)** - Small line used to throw between barges, boat and/or shore, connected to a face line, in order to pull together.

**Head Log** – The heavily reinforced section at each end of the barge and in the bow of the towboat to take the pressure of pushing the tow.

**Headline** – Mooring line at front (head) to hold tow or barge “in place”.

**Heater Fuel Rate** – The number of gallons of fuel used by the heaters in an hour. (*Note: Does not apply when heaters are electric)*

**Heater Fuel Exclusion** – The number of gallons that are exempt form tax due to usage in the heaters. (*Note: This is only calculated when the propulsion engines and propulsion engines and the heaters are pulling fuel from the same tank)*

**Hopper Barge** – An open compartment barge used for dry bulk cargo that doesn’t require protection from the weather, such as pipe, scrape, coal, ore, etc.

**Ice Pier** – A heavily constructed shield of concrete piling to shelter a bridge, pier, etc. To brace against large amounts of ice in the river.
**Integrated Tow** – A tow using semi-rake and box barges in combination so the full will appear to be one barge.

**In-transit Merchandise** - Merchandise coming into the United States from a foreign country and shipped to a foreign country without having been entered as an import. In-transit merchandise is treated as an **Import (Inbound)** when unloaded from a vessel and as an **Export (outbound)** when loaded onto a vessel.

**Jack Staff** – A vertical pole erected at the head of tow directly ahead of towboat. The flag windsock, or peep light aids pilot to align the tow in river navigation.

**Jockey Line** – Lashing (rope or wire lines) used to prevent lateral movement between barges.

**Jumbo Barge** - A barge that is 35 feet wide by 195 or 200 feet ling and may also be either a hopper or cover-type barge.

**Keel** – The main support of a vessel frame, extending from bow to stern. The part of the vessel that’s in the water.

**Kick Line** – A line used to hold stern of towboat while backing in order to kick the head out into the stream.

**Kill out Tow** (Kill Her Out) - To back up with towboat until headway is stopped.

**Knockout Single** – To uncouple the barges from the towboat and lay along side the barge(s) during lockage. Also called a “set over single”.

**Kort Nozzle** – A funnel shaped structure built around the propellers of towboats to concentrate the water flow to and from the propellers.

**Land** (mooring) – Tying off tow and/or boat to landing area.

**Land Wall** – A concrete wall that is part of the lock on the landward side.

**Lashing** – A rope or wire that is used to secure two barges together.

**Lash/Seabee Barge** – Is defined as a barge, usually flat-bottomed and rectangular in structure, designed to be lightered aboard a mother ship. (Common sizes are LASH 62x31 and Seabee 98X35)

**LASH SHIPS** - LASH stand for Lighter Aboard Ship. It is a specialized container ship carrying very large floating containers, or "lighters." The ship carries its own massive crane, which loads and discharges the containers over the stern. The lighters each have a capacity of 400 tons and are stowed in the holds and on deck. While, the ship is at sea with one set of lighters, further sets can be made ready. Loading and discharge are rapid at about 15 minutes per lighter, no port or
dock facilities are needed, and the lighters can be grouped for pushing by towboats along inland waterways.

**Lateral Coupling** - Coupling where bow and stern of barges meet, left to right.

**Lead Barges** - The head or first barge(s) of tow.

**Lead Line** – Small line, manila or sash cord, to measure depth of water.

**Leaving line** – Lines that are left on barges when dropped off to fleet operation.

**Left Bank** – The left descending bank of a river. It is marked by red buoys, white or red lights and red reflectors.

**Levee** - A built-up embankment positioned close to the river to hold back high water.

**Light Boat** – A towboat without a tow.

**Line Haul** – The movement of freight over the main route of a transportation line. Not a switching service confined to a small area.

**Liquid Fuel** - Any liquid fuel including gasoline, diesel fuel (even dyed), special motor fuel, or bunker C residual fuel oil.

**Lock** – The apparatus which permits a vessel to move from one level of water to another. Consists of enclosed gates which lower and raise water. This is necessary for all waterways. Connecting bodies of water of different water levels.

**Lock Cell** – The chamber of a lock.

**Lock Gates** – A large movable, structured barrier used to hold back the water in a lock chamber.

**Lock Line** – Used to hold barges during the raising or lowering of water in a lock.

**Lock Traffic Lights** - Red, yellow and green lights located at both ends of a lock to control traffic.

**Log Book** – This term refers to the official register kept by the master or captain of a boat or ship which records daily events.

**Loose Head** – Light boat (boat without tow) getting underway.

**Low Water Dam** - A low level dam designed to hold back head waters so as to maintain depth in a certain area. The dam may be visible at the low water stage.

**Make Up Tow** - Assemble barges into a tow.
Mainline Tows – Tows that regularly run up and down the principle waterways as opposed to working in a smaller geographical area.

Monkey Line – Small hand line used by lock personnel to throw down or bring up a lock line.

Mooring - The act of securing a vessel.

Mooring Cell (Dolphin) – A river front structure generally comprised of steel piling or wooden piles for securing barges.

Mule Train - Tying barges end to end with loose lines in order to maneuver them through heavy ice.

Net Ton - 2,000 pounds.

Operating Hours – The hours in the month the vessel is operated.

Outer Lock Wall - The wall on the river side of a lock.

Pallet – A small portable platform for holding material for storage or transportation.

Passenger Vessels – Are defined as vessels used primarily for the transportation of persons; commercial vessels transporting property in addition to transporting passengers; and ferryboats carrying passengers and their vehicles.

Peep Light – A small, low intensity, (normally blue) light mounted on the jack staff used by the pilot for tow alignment at night.

Pelican Hooks – Hinged hook generally on the end of a ratchet located on front of barge and connected to a caval which allows chain linked lines to be locked into mooring lines.

Pike Pole - A long pole, with a hook on one end, used for pulling in a line or object that is out or reach. Sometimes marked and used for measuring water depth.

Piling - A single pole or group of poles placed together at the edge of the water in order to tie tows, barges or boats at the waters edge.

Port - The left side of a ship.

Receipts - Traffic moving from one location to another where the destination is within the limits of the subject port.

Shipments - Traffic moving from one location to another where the origin is within the limits of the subject port.

Propulsion Fuel - The fuel used in the propulsion engines of a vessel.
**Rake** - Slanted portion of the hull at the end of barges and boats.

**Ratchets** - A heavy tool with coarse-screw threads used for tightening up wire lashings which hold barges of a tow together.

**Rearrange Tow** - To shift barges in a tow.

**Rigging** - Wire cables, chain length, ratchets and other miscellaneous gear used for securing barges in a tow.

**Right Bank** - The right descending bank of a river on which black buoys, green or white lights, and white or silver reflective material are maintained.

**SEABEE** - Sea-barge, a barge carrier design similar to "LASH" but which uses rollers to move the barges aboard the ship; the self-propelled loaded barges are themselves loaded on board as cargo and are considerably larger than those loaded on LASH ships.

**Screws** - The “propellers” of a towboat.

**Set Over Single** - To uncouple the barges from towboat and lay along side the tow during lockage. Also called a knockout single.

**Single** - A tow that can be locked through in one (or a single) lockage.

**Spar Barge** - A barge retired from active service and used to anchor other barges or a fleet of barges.

**Scrap Barge** - A barge to be cut up for its value as scrap metal.

**Spike** - One barge that is wired to head of tow that is 2 or 3 barges wide.

**Splitting on the Heads** - When a towboat is faced up to the center of two strings of barges.

**Spring Line** (Backing Line) - A line, used in mooring, to hold the boat from running upstream. The lines cross one another.

**Sooging** - Scrubbing or washing down any part of the towboat.

**Standard Barge** - A barge that is 26 feet wide by 175 feet long and may be either an open or closed barge.

**Starboard** - The right side of the vessel, looking forward.

**Stern** - The back of the towboat or barge. (Bow is the front)

**Stern Line** - A long line that secures the tow from the stern (back) of the vessel.
**Strung Out** - Barges placed end to end in a straight line, or in tandem.

**Tank Barge** - Type of barge used for liquid cargo such as gas, oil, molasses, etc.

**Tax Ratio** – The time the vessel is in taxable waters. (Inland Waterways System – 27 waterways) Usually expressed in percentage of time.

**Taxable Person** - The person liable for the tax are the persons operating the vessel in which the propulsion fuel is consumed. Including an independent contractor who operates or leases/rents the vessel.

**Taxable Fuel** – The number of gallons used by the vessel while traveling in taxable waters (Inland Waterway System) Formula – Total fuel consumed minus exempt fuel (generator/heaters – If pulled from the same fuel tank) times the time spent in taxable waters.

**Timberhead** – One or two upright mushroom-shaped pins on the head and stern of barge used for the coupling or barges for end-to-end towing.

**Toothpick** - Steel bar, about 3 feet long, placed in ratchet ends to keep wire from turning when tightening ratchets.

**Tons** - The tonnage figures provided throughout the *Waterborne Commerce of the United States, WCUS, Parts 1-5* represent short tons (2000 pounds).

Where noted, tonnage figures are rounded to the nearest thousand tons. A zero represents less than 500 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

**Top Around** - The turning of a tow from upbound to downbound, either intentionally or unintentionally.

**Tow** - One or more barges (or other floating vessels) in a group and pushed by a towboat. A tow is made up when it is lashed together by wire rope and made ready for transport.

**Towboat/Push Boat** - Self-propelled vessel designed to tow/push barges and pontoons. The hull is usually rectangular in plan and has little freeboard. A pair of knees of ample strength and height engage barges of various depths to maneuver the tow. A vessel (boat) designed primarily to push barges.

**Tow Knees** - Heavy steel fixtures on the bow of towboats to enable them to push against the stern of barges.

**Tow Line** - Normally, a lashing (line or rope) from the forward head of one barge to the after head of a barge along side.
**Tugboat** – Self-propelled vessel with a V-shaped bow designed for the towing (and pushing) of ships or other floating structures such as barges in ports/harbors.

**Turn A Tow** - When a towboat meets another towboat (belonging to the same company and proceeding in the opposite direction) and exchanges its entire tow, and returns in the same direction it came.

**Unit Tow** - An integrated tow consisting of bow, center, and stern sections, generally in the liquid cargo trade.

**Vessel** - Every kind of water and air craft or other contrivance used or capable of being used as a means of transportation on water, or on water and in the air, as well as any ship, boat, barge, or other water craft or any structure capable of floating on the water.

**Waterways Traffic Direction**

- **Upbound** - Traffic that moves in an upstream direction. For waterways without a characteristic monodirectional flow (e.g. the Gulf Intercoastal Waterway), “upbound” means in a northerly or easterly directions.

- **Downbound** - Traffic that moves in a downstream direction. For waterways without a characteristic monodirectional flow, “downbound” means in a southerly or westerly direction.

- **Inbound** - Traffic moving from one waterway into another where the destination is on the subject waterway.

- **Outbound** - Traffic moving from one waterway into another where the origin is on the subject waterway.

**Wheel** - The “propellers” of a towboat. Also, often called the “screws” of a towboat.

**Wicket** - A rectangular, heavily constructed slab of wood and steel hinged in a counter-balance way so as to be lying flat on the river bed when down, and when raised will be held upright by the pressure of the water. These wickets are placed in a parallel line across the river and when all are in a raised position, they form a wall of dam, thus backing up the water and raising it to the pool level.

**Winch** - Used for facing the boat up tightly to the barge (or barges) closest to the boat.

**Wing Tanks** - The void area of a barge between the cargo hold and barge exterior.

**Wires** - A short length of wire rope of varying sizes used to couple barges within a tow. The are usually of standard length to span the distance from one timberhead to another on the barges and are tightened with ratchets. Names are as follows: Tow wire, backing wire, face wire, stern wire, scissor wire and lashing.
**Yawl** - A small oar-propelled open boat or skiff carried on board towboats for use as a utility or safety boat.

[1] Statement of J. Ron Brinson, President and CEO of the Port of New Orleans, May 16 2000
[4] United States Army Corps of Engineers