January 16, 2011

To: All Prospective Bidders

City of Key West Bid No. 11-009 – Unleaded Fuel Tank Replacement contains the following documents:

a. Cover letter one (1) page in length
b. General Conditions of Invitation to Bid four (4) pages in length
c. Statement of No Bid one (1) page in length
d. Specifications three (3) pages in length
e. Bid Response Form one (1) page in length
f. Required permit/license one (1) page in length
g. Anti-Kickback Affidavit one (1) page in length
h. Public Entity Crimes Certification three (3) pages in length
i. Local Preference Certification one (1) page in length
i. Call for Bids one (1) page in length

Please review your bid package to ensure it contains all of these documents. If not, contact Sue Snider, City of Key West Purchasing Agent at (305) 809-3815, immediately, to obtain copies of any missing document(s).

If your firm determines that a "No Bid" response is required, please complete and return the "Statement of No Bid". Firms/corporations submitting to bid should ensure that the following documents are completed, certified, and returned as instructed: Bid Response Forms, Anti-Kickback Affidavit, Public Entity Crimes Certification, copy of current Occupational License.

SUBJECT:	BID NO. 11-009 UNLEADED FUEL TANK REPLACEMENT
ISSUE DATE:	JANUARY 16, 2011
PRE BID CONFERENCE:	FEBRUARY 2, 2011 @ 10:00 AM
MAIL BIDS TO:	CITY CLERK CITYOF KEY WEST 525 ANGELA STREET KEY WEST, FL 33040
DELIVER BIDS TO:	SAME AS ABOVE
BIDS MUST BE RECEIVED: NOT LATER THAN:	FEBRUARY 16, 2011 3:30 PM

SUE SNIDER
PURCHASING AGENT
CITY OF KEY WEST

ses

Enclosures

GENERAL CONDITIONS
CITY OF KEY WEST

1. PREPARATION OF BIDS:

Bids will be prepared in accordance with the following:

(a) The enclosed Bid Response Form is to be used, other forms may be rejected.
(b) All information required by the BID form shall be furnished. The bidder shall print or type his/her name and manually sign the Bid Response Form plus each continuation sheet on which an entry is made.
(c) Proposed delivery time must be shown and shall include Sundays and holidays.
(d) Bidder shall thoroughly examine the specifications, drawings, schedule, instructions, and all other contract documents.
(e) All proposals shall be submitted in original plus six (6) copies.
(f) Bidders are advised that all City contracts are subject to all legal requirements provided for in City ordinances and/or State and Federal Statutes.

2. DESCRIPTION OF SUPPLIES:

(a) Any manufacturer's name trade name, brand name, or catalog number used in the specifications is for the purpose of describing and establishing general quality levels. SUCH REFERENCES ARE NOT INTENDED TO BE RESTRICTIVE. Bids will be considered for any brand, which meets the quality of the specifications for any item.

3. SUBMISSION OF BIDS:

(a) Bids and changes thereto shall be enclosed in sealed envelopes addressed to the City Clerk, City of Key West. The name and address of the bidder, the date and hour of the bid opening and the bid number shall be placed on the outside of the envelope.
(b) Bids must be submitted on the form furnished. Telecopier bids will not be considered.
(c) Unless otherwise indicated, all City of Key West Bids may be awarded on a line-item basis.

4. REJECTION OF BIDS:

(a) The City may reject bids:
    1. For budgetary reasons, or
    2. The bidder misstates or conceals a material fact in its bid, or

3. The bid does not strictly conform to the law or is non- responsive to proposal requirements, or
4. The bid is conditional, or
5. A change of circumstances occurs making the purpose of the bid unnecessary to the City.

(b) The City may also waive any minor informalities or irregularities in any bid.

5. WITHDRAWAL OF BIDS:

(a) Bids may not be withdrawn after the time set for the bid opening for a period of time as specified in the Instruction to Bidders.
(b) Bids may be withdrawn prior to the time set for bid opening. Such request must be in writing.

6. LATE BIDS OR MODIFICATION:

(a) Bids and modifications received after the time set for the bid opening will not be considered.
(b) Modifications in writing received prior to the time set for the bid opening will be accepted.

7. LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS:

(a) Bidders shall comply with all local, state and federal directives, orders and laws as applicable to this bid and subsequent contract(s) including, but not limited to:
   1. Equal Employment Opportunity (EEO), in compliance with Executive Order 11246, as applicable to this contract.
   2. Minority Business Enterprises (MBE), as applicable to this contract.
   3. Occupational Safety and Health Act (OSHA), as applicable to this contract.

8. COLLUSION:

(a) The bidder by affixing his signature to this Invitation to Bid, agrees to the following: "Bidder certifies that his/her bid is made without previous understanding, agreement, or connection with any person, firm, or corporation making a bid for the same items and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action.

9. VARIANCE IN CONDITIONS:

(a) Any and all special conditions and specifications attached hereto which vary from General Conditions shall have precedence.

10. APPROPRIATIONS CLAUSE:

(a) If the contract or delivery extends beyond the current fiscal year, which ends on September 30, the contract shall be contingent upon the availability of funds appropriated for such purposed in the City's annual budget for the next succeeding fiscal year.

11. CLARIFICATION OR OBJECTION TO BID SPECIFICATIONS:

(a) If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of the specifications or other bid documents or any part thereof, he may submit to the Finance Director on or before five (5) days prior to scheduled opening a request for clarification. All such requests for information shall be made in writing and the person submitting the request will be responsible for prompt delivery. Any interpretation of the bid, if made, will be made only by Addendum duly issued. A copy of such Addendum will be mailed or delivered to each person receiving an Invitation to Bid. The City will not be responsible for any other explanation or interpretation of the proposed bid made or given prior to the award of the contract. Any objection to the specification and requirements as set forth in the bid must be filed in writing with the Finance Director on or before five (5) days prior to the scheduled opening.

12. DISCOUNTS:

(a) Bidders may offer a cash discount for prompt payment; however, such discount shall not be considered in determining the lowest net cost for bid evaluation proposed. Bidders are encouraged to reflect cash discounts in the unit price quoted.

(b) In connection with any discount offered, time will be computed from the date of receipt of supplies or services or form the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.

13. AWARD OF CONTRACT:

(a) The contract will be awarded to the lowest responsive and responsible bidder whose bid, conforming to the Invitation to Bid, is most advantageous to the City, prices and other factors considered.

(b) The City reserves the right to accept and award item by item, and/or by group or in the aggregate, unless the bidder qualifies his bid by specified limitations as provided in 4 (a) (3).

(c) If two or more bids received are for the same total amount or unit price, quality and service being equal, the contract will be awarded to the bidder that maintains an office inside the city limits of Key West. Monroe County will be the determining factor. When neither of these conditions exists, bids for identical amounts will be determined by the drawing of lots in public by the Finance Director.

(d) Prices quoted must be f.o.b. Key West, Florida, with all transportation charges prepaid unless otherwise specified in the Invitation to Bid.

(e) Successful Bidder will enter into a contract in accordance with the bid document in a form sufficient to the City Attorney.

14. LOCAL PREFERENCE:

(a) Under a competitive bid solicitation, when a responsive, responsible non-local business submits the lowest price bid, and the bid submitted by one or more responsive, responsible local businesses in within five percent (5%) of the price submitted by the non-local business, then the local business with the apparent lowest bid offer may have the opportunity to submit an offer to match the price(s) offered by the lowest, qualified and responsive non-local bidder within three working days of the notice of the intent to award. If the lowest local bidder submits a bid that fully matches the lowest bid from the lowest non-local bidder tendered previously, then the award shall be made to such local bidder. If the lowest local bidder declines or is unable to match the lowest non-local bid price(s), then the award shall be made to the non-local business.

15. DAMAGE:

(a) Successful bidder(s) will be responsible for making any and all claims against carriers for missing or damaged items.

16. TRAVEL AND REIMBURSABLE OUT OF POCKET EXPENSE:

(a) Should there be travel and/or reimbursable out of pocket expenses relevant to this contract, Florida Statute 112.061 (Per diem and travel expenses of public officers, employees, and authorized persons) will be followed.

IF A TABULATION OF BIDS IS DESIRED, PLEASE ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE WHEN SUBMITTING YOUR PROPOSAL.

STATEMENT OF NO BID # 11-009 – UNLEADED FUEL TANK REPLACEMENT

NOTE:IF YOU DO NOT INTEND TO BID, PLEASE RETURN THIS FORM ONLY

CITY OF KEY WEST
FINANCE DEPARTMENT
P.O. BOX 1409
KEY WEST, FLORIDA 33040
ATTN: S. SNIDER

We, the undersigned have declined to bid on the above-noted Invitation to Bid for the following reason(s)

___ Insufficient time to respond to Invitation to Bid
___ Do not offer this product
___ Our schedule will not permit us to perform
___ Unable to meet specifications
___ Specifications unclear (please explain below)
___ Remove us from your "Bidder Mailing List"
___ Other (Please specify below)

_____
_____
_____

We understand that if a "No Bid" statement is not returned, our name may be removed from the Bidder's list of the City of Key West.

COMPANY NAME:_____

AUTHORIZED AGENT:_____

COMPANY
ADDRESS:_____

DATE:_____ TELEPHONE:_____

BID SPECIFICATIONS

Required Specifications for the Unleaded Fuel Tank replacement project. We are requesting that two separate bids be presented according the details below:

BID #1

Hardware / Accessories:

- 12,000 Gallon Steel Dual Wall Above Ground Storage Tank with appropriate UL Rating, and meeting all Florida DEP fuel storage tank leak and fire specifications (site inspection recommended prior to quote)
- Tank must be painted / coated / sealed with highly weather resistant, epoxy based paint / sealant
- Tank must be fitted with appropriate vents, fittings and valves to meet all minimum specifications for the state of Florida.
- Mounted fill box with appropriate fill piping, valves and fittings for tank filling, including overfill protections with audible level alarm
- Clock / level gauges mounted on tank or visible from fill point
- Tank level probe, secondary containment (in tank outer wall) fluid detection / leak detection compatible with Omnetech monitoring equipment
- Tank should include a pump platform with a canopy covering on one end of the tank.
- On board (platform) Pump system to include a Gasboy Twin Hose Dispenser package including safety shear valve, fire extinguisher, hose, breakaways and nozzle. Pump system should have mechanical (not digital) counters and mechanisms.
- All external fittings and piping materials must be stainless steel.
- All required decals

Site Modification:

- Skid / Pad preparation and construction to be performed by the City of Key West, pad specifications will be provided for construction (ie. Dimensions, thickness, concrete grade / pressure ratings, etc.) to the City of Key West with sufficient time to allow for construction.
- All electrical and system monitoring conduit will be run to the pad, to a specified point detailed by the vendor and setup by the City of Key West. Electrical wiring and connection as well as final connections and testing to be provided by vendor and included in the bid.

Plans / Testing / Disposal:

- All required drawings and plans to be submitted for permitting
- All product line testing, and any required tank testing to be included in bid
- Removal and complete disposal of existing Unleaded storage tanks (2 – 4,000 gallon single wall steel tanks) and any discarded piping / additional materials.

Existing Equipment Credit

- Please provide a line item detailing possible credit for existing pumping equipment (two functional Gasboy single dispensers – suction pump system). Details and condition to be inspected during scheduled site visit.

Miscellaneous:

- Please detail any additional required items / processes as seen appropriate / required by the vendor / installer or any State of Florida / Federal requirements
- Staff is requiring a scheduled site visit prior to submitting quotes to discuss miscellaneous details and site specific considerations.

BID #2

Hardware / Accessories:

- Two (2) 6,000 Gallon Steel Dual Wall Above Ground Storage Tanks with appropriate UL Rating, and meeting all Florida DEP fuel storage tank leak and fire specifications (site inspection recommended prior to quote)
- Tanks must be painted / coated / sealed with highly weather resistant, epoxy based paint / sealant
- Tanks must be fitted with appropriate vents, fittings and valves to meet all minimum specifications for the state of Florida.
- Mounted fill box with appropriate fill piping, valves and fittings for tank filling, including overfill protections with audible level alarm
- Clock / level gauges mounted on tank or visible from fill point
- Tank level probe, secondary containment (in tank outer wall) fluid detection / leak detection compatible with Omnetech monitoring equipment
- Tank should include a pump platform with a canopy covering on one end of the tank.
- On board (platform) Pump system (each tank) to include a Gasboy Twin Hose Dispenser package including safety shear valve, fire extinguisher, hose, breakaways and nozzle. Pump system should have mechanical (not digital) counters and mechanisms.
- All external fittings and piping materials must be stainless steel.
- All required decals

Site Modification:

- Skid / Pad preparation and construction to be performed by the City of Key West, pad specifications will be provided for construction (ie. Dimensions, thickness, concrete grade / pressure ratings, etc.) to the City of Key West with sufficient time to allow for construction.
- All electrical and system monitoring conduit will be run to the pad, to a specified point detailed by the vendor and setup by the City of Key West. Electrical wiring and connection as well as final connections and testing to be provided by vendor and included in the bid.

Plans / Testing / Disposal:

- All required drawings and plans to be submitted for permitting
- All product line testing, and any required tank testing to be included in bid
- Removal and complete disposal of existing Unleaded storage tanks (2 – 4,000 gallon single wall steel tanks) and any discarded piping / additional materials.

Existing Equipment Credit

- Please provide a line item detailing possible credit for existing pumping equipment (two functional Gasboy single dispensers – suction pump system). Details and condition to be inspected during scheduled site visit.

Miscellaneous:

- Please detail any additional required items / processes as seen appropriate / required by the vendor / installer or any State of Florida / Federal requirements

Staff is requiring a scheduled site visit prior to submitting quotes to discuss miscellaneous details and site specific considerations.

The pre-bid meeting will be scheduled for 10:00am Wednesday February 2nd, 2011 at 627 Palm Ave. Key West, FL 33040 and attendance will be required to submit a valid bid.

3:30pm on Wednesday February 16th, 2011 is the deadline for bid submittals.

BID
RESPONSE

BID #1Total price in words_____

BID #2 Total price in words_____

PRICE FOB KEY WEST, FL
PAYMENT TERMS: 45 days after delivery
DELIVERY _____ DAYS ARO

Contact Eduardo Herrara @ 305.809.3905with questions.

BIDDER REPRESENTATION

I represent that this bid is submitted in compliance with all terms, conditions and specifications of the Call for Bid and that I am authorized by the owners/principals to execute and submit this proposal on behalf of the business identified below:

BUSINESS NAME:_____

STREET ADDRESS:_____

CITY/STATE/ZIP:_____

PRINT NAME OF AUTHORIZED REPRESENTATIVE:_____

TITLE/POSITION OF AUTHORIZED REPRESENTATIVE:_____

DATE SUBMITTED:_____TELEPHONE:_____

LICENSE REQUIRED
& COSTS

POLLUTANT STORAGE CONTRACTOR
FEE NOT TO EXCEED $309.75

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

COUNTY OF MONROE

I the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employee of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

BY:_____

sworn and prescribed before me this _____ day of _____, 2011

_____

NOTARY PUBLIC, State of Florida

My commission expires:_____

SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(A)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS,

1. This sworn statement is submitted to _____
by _____
(print individual's name and title)
for _____
(print name of entity submitting sworn statement)

whose business address is _____

and (if applicable) its Federal Employer Identification Number (FEIN) is _____

(if the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement): _____

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "conviction" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 01, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:
    1. A predecessor or successor of a person convicted of a public entity crime: or

2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members and agent who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment of income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statute means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement (indicate which statement applies).

___ Neither the entity submitting this sworn statement, or any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July, 1989.

___ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989.

___ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR THE CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

_____
(SIGNATURE)

_____
(DATE)

STATE OF_____

COUNTY OF_____

PERSONALLY APPEARED BEFORE ME, the undersigned authority
_____who, after first being sworn by me,
(name of individual)
affixed his/her signature in the space provided above on this
_____day of _____, 2011

_____
NOTARY PUBLIC

My commission expires:_____

LOCAL VENDOR CERTIFICATION PURSUANT TO CKW ORDINANCE 09-22 SECTION 2-798

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

a. *Principle address as registered with the FL Department of State located within 30 miles of the boundaries of the city, listed with the chief licensing official as having a business tax receipt with its principle address within 30 miles of the boundaries of the city for at least one year immediately prior to the issuance of the solicitation.*

b. *Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of its boundaries.*

c. Having paid all current license taxes and any other fees due the city at least 24 hours prior to the publication of the call for bids or request for proposals.

- o Not a local vendor pursuant to Ordinance 09-22 Section 2-798
- o Qualifies as a local vendor pursuant to Ordinance 09-22 Section 2-798

If you qualify, please complete the following in support of the self certification & submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name

Phone:

Current Local Address:
(P.O Box numbers may not be used to establish status)

Fax:

Length of time at this address

_____ _____
Signature of Authorized Representative Date

STATE OF_____
COUNTY OF_____

The foregoing instrument was acknowledged before me this _____day of _____, 20___.
By_____, of_____
(Name of officer or agent, title of officer or agent) Name of corporation acknowledging)
or has produced_____as identification
(type of identification)

_____
Signature of Notary

_____
Print, Type or Stamp Name of Notary

Return Completed form with
Supporting documents to:
City of Key West Purchasing

_____
Title or Rank

CALL FOR BIDS

NOTICE is hereby given to prospective bidders that sealed bids will be received by the CITY of KEY WEST, FLORIDA by the office of the City Clerk, 525 Angela Street, Key West, Florida 33040 until 3:30P.M. February 16, 2011 for Bid 11-009 – Unleaded Fuel Tank Replacement. Bids will be opened in the Office of the City Clerk then and there and publicly read aloud. Any bid received after the time announced will not be considered.

SPECIFICATIONS AND BID DOCUMENTS may be obtained from DemandStar by Onvia at www.demandstar.com/supplier or call toll-free at 1-800-711-1712. One (1) original and six (6) copies of the bids are to be enclosed in two (2) sealed envelopes, one within the other, each Clearly marked on the outside: BID # 11-009 – Unleaded Fuel Tank Replacement, addressed and delivered to:

CITY CLERK, CITY OF KEY WEST, FLORIDA
CITY HALL, 525 ANGELA STREET
KEY WEST, FLORIDA 33040

At the time of the award, the successful Bidder must show satisfactory document of such State, County and City licenses as would be required. Any permit and/or license requirement and subsequent costs are located within the bid documents. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the bid in question. The City may reject bids: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bidder does not strictly conform to the law or is non-responsive to bid requirements, (4) if the bid is conditional, (5) if a change of circumstances occurs making the purpose of the bid unnecessary or (6) if such rejection is in the best interest of the City. The City may also waive any minor informalities or irregularities in any bid.

ADDENDUM NO. ONE

ITB – Fuel Tank

To All Bidders:

The following change is hereby made as an addition to ITB 11-009-0-2011/SS as fully and as completely as if the same were fully set forth therein:

The City has included Fire Code specifications as well as roadway capacity load specifications and permitting procedures for transportation of heavy loads via roadways and bridges. Please review the transportation studies prior to submitting your response.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 by acknowledging Addendum in their proposal or by submitting the addendum with the bid package. Bids submitted without acknowledgement or without this Addendum may be considered non-responsive.

_____ _____

Signature Name of Business

NFPA 30

Aboveground Tank Installation

Chapter 4 Tank Storage

4.1 General.

4.1.1 Scope. This chapter shall apply to the following:

(1) The storage of flammable and combustible liquids, as defined in 1.7.3, in fixed aboveground tanks
(2) The storage of flammable and combustible liquids in portable tanks and bulk containers whose capacity exceeds 250 gal (1136 Liters)
(3) The design, installation, operation and maintenance of such tanks, portable tanks, and bulk containers.

4.2 Design and Construction of Tanks.

4.2.1 General Requirements. Tanks shall be permitted to be of any shape, size, or type consistent with sound engineering. Metal tanks shall be welded according to ASME standards

4.2.2 Materials of Construction. Tanks shall be designed and built in accordance with recognized good engineering standards for the material of construction being used. Tanks shall be of steel or other approved noncombustible material, with the following limitations and exceptions:

(a) The materials of construction for tanks and their appurtenances shall be compatible with the liquid to be stored. In case of doubt about the properties of the liquid to be stored, the supplier, producer of the liquid, or other competent authority shall be consulted.

(b) Tanks shall be permitted to be constructed of combustible materials only when approved by the authority having jurisdiction.

4.2.3 Design Standards

4.2.3.1 Design Standards for Atmospheric Tanks

2.2.3.1.1 Atmospheric tanks, including those incorporating secondary containment, shall be designed and constructed in accordance with recognized standards or approved equivalents. Atmospheric tanks that meet any of the following standards shall be deemed as meeting the requirements of 4.2.3.1

(1) UL 142, *Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids;* UL 2080 *Standard for Fire Resistant Tanks for Flammable and Combustible Liquids;* or UL 2085, *Standard for Protected Aboveground Tanks for Flammable and Combustible Liquids*
(2) API Standard 650. *Welded Steel Tanks for Oil Storage*

4.2.4 Design of Tank Supports

4.2.4.1 Supports for tanks shall be designed and constructed in accordance with recognized standards or approved equivalents
4.2.4.2 Tanks shall be supported in a manner that prevents excessive concentration of loads on the supported portion of the shell
4.2.4.3 In areas subject to earthquakes, tank supports and connections shall be designed to resist damage as a result of such shocks

4.2.5 Design of Tank Vents

4.2.5.1 Normal Venting for Tanks
4.2.5.1.2 Normal vents shall be sized in accordance with API Standard 2000, *Venting Atmospheric and Low-Pressure Storage Tanks,* or another accepted standard. Alternatively the normal vent shall be at least as large as the largest filling or withdrawal connection but in no case shall it be less than 1.25 in. (32 mm) nominal inside diameter.

4.2.7 Vaults for Aboveground Tanks

4.2.7.2 General. Aboveground tanks shall be permitted to be installed in vaults that meet the requirements of 4.2.7. Except as modified by the provisions of 4.2.7, vaults shall meet all other applicable provisions of this code. Vaults shall be constructed and listed in accordance with UL 2245, *Standard for Below-Grade Vaults for Flammable Liquid Storage Tanks.* Vaults shall be permitted to be either above or below grade.

4.2.7.3 Vault Design and Construction. Vaults shall be designed and constructed to meet the following requirements:

(a) The walls and floor of the vault shall be constructed of reinforced concrete at least 6 in. (150 mm) thick.
(b) The top of an above grade vault that contains a tank storing Class I flammable liquid or Class II liquid when stored at temperatures above its flash point shall be constructed of noncombustible material and shall be designed to be weaker than the walls of the vault to ensure that the thrust of any explosion occurring inside the vault is directed upward before destructive internal pressure develops within the vault. The top of an at grade or below grade vault that contains a tank storing Class I flammable liquid or ClassII liquid when stored at temperatures above their flash point shall be designed to relieve or contain the force of any explosion occurring inside the vault.

(c) The vault shall be liquid tight
(d) The vault shall be provided with an approved means to admit a fire suppression agent.
(e) The vault shall be provided with a means for personnel entry

4.2.7.4 Tank Selection and Arrangement. Tanks shall be listed for aboveground use. Each tank shall be in its own vault and shall be completely enclosed by the vault. Sufficient clearance between the tank and the vault shall be provided to allow for visual inspection and maintenance of the tank and its appurtenances. Backfill shall not be permitted around the tank.

4.2.7.5. Tank Appurtenances

4.2.7.5.1 Vent pipes that are provided for normal tank venting shall terminate outside and at least 12 ft above ground level.

4.3.1.4 Where a tank is located in an area subject to flooding, provisions shall be taken to prevent tanks, either full or empty, from floating during a rise in water level up to the maximum flood stage

4.3.2 Installation of Aboveground Tanks

4.3.2.1 Location with Respect to Property Lines, Public Ways, and Important Buildings on the Same Property

4.3.2.1.1 Tanks storing Class 1, Class II, or Class IIIA stable liquids and operating at pressures not in excess of 2.5 psig shall be located in accordance with the following table:

Tank Capacity (gal)	Minimum Distance from Property Line that is or Can Be built upon, including the Opposite Side of a Public Way (ft)	Minimum Distance from Nearest side of Any Public Way or from Nearest Important Building on the Same Property (ft)
275 or less	5	5
276 to 750	10	5
751 to 12,000	15	5
12,001 to 30,000	20	5

4.3.2.1.5 Tanks storing IIIB stable liquids shall be located in accordance with table 2.3.2.1.5.

Table 4.3.2.1.5 Class IIIB Liquids

Tank Capacity (gal)	Minimum Distance from Property Line that is or Can Be built upon, including the Opposite Side of a Public Way (ft)	Minimum Distance from Nearest side of Any Public Way or from Nearest Important Building on the Same Property (ft)
12,000 or less	5	5

4.3.2.3 Control of Spills from Aboveground Tanks. Every tank that contains a Class I, Class II, or Class IIIA liquid shall be provided with means to prevent an accidental release of liquid from endangering important facilities and adjoining property from reaching waterways. Such means shall meet the requirements of 4.3.2.3.3.

4.3.2.3.3 Secondary Containment Tanks. Where a secondary containment tank is used to provide spill control, the tank shall meet all of the following requirements:

(a) The capacity of the tank shall not exceed 12,000 gal.
(b) All piping connections to the tank shall be made above the normal maximum liquid level.
(c) Means shall be provided to prevent the release of liquid from the tank by siphon flow.
(d) Means shall be provided for determining the level of liquid in the tank. This means shall be accessible to the delivery operator
(e) Means shall be provided to prevent overfilling by sounding an alarm when the liquid level in the tank reaches 90 percent of capacity and by automatically stopping delivery of liquid to the tank when the liquid level in the tank reaches 95 percent of capacity. In no case shall these provisions restrict or interfere with the proper functioning of the normal vent or the emergency vent
(f) Spacing between adjacent tanks shall not be less than 3 ft.
(g) The tank shall be capable of resisting the damage from the impact of a motor vehicle or suitable collision barriers shall be provided.
(h) Where the means of secondary containment is enclosed it shall be provided with emergency venting in accordance with 4.2.5.2
(i) Means shall be provided to establish the integrity of the secondary containment, in accordance with 4.4.2.3 and 4.4.2.4. The secondary containment shall be designed to withstand the hydrostatic head resulting from a leak from the

primary tank of the maximum amount of liquid that can be stored in the primary tank

4.3.2.4 Vent Piping for Aboveground Tanks. Piping for normal and emergency relief valve venting shall be constructed in accordance with chapter 5 of NFPA 30.

4.3.2.5 Tank Openings Other than Vents for Aboveground Tanks

4.3.2.5.1 Each connection to an aboveground tank through which liquid can normally flow shall be provided with an internal or an external valve located as close as practical to the shell of each tank.

4.3.2.5.2 Each connection below the liquid level through which liquid does not normally flow shall be provided with a liquid tight closure such as a valve, plug, or blind, or a combination of these.

4.3.2.5.3 Openings for gauging on tanks storing Class I liquids shall be provided with a vapor tight cap or cover.

4.3.2.5.4 Fill pipes that enter the top of a tank shall terminate within 6 in. of the bottom of the tank. Fill pipes shall be installed or arranged so that vibration is minimized.

4.3.2.5.5 Filling and emptying connections for Class I, Class II, and Class III liquids that are connected and disconnected shall be outside of buildings at a location free from any source of ignition. They shall be located not less than 5 ft away from any building opening. Such connections for any liquid shall be closed and liquid tight when not in use and shall be properly identified.

4.3.2.6 Requirements for Aboveground Tanks Located in Areas Subject to Flooding.

4.3.2.6.1 Vertical tanks shall be located so that the tops of the tanks extend above the maximum flood stage by at least 30 percent of their allowable storage capacity.

4.3.2.6.2 Horizontal tanks that are located where more than 70 percent of the tank's storage capacity will be submerged at the established flood stage shall be secured by one of the following methods:

1. Anchor to resist movement
2. Attach to a foundation of steel and concrete or of concrete having sufficient weight to provide adequate load for the tank when filled with liquid and submerged by floodwater to the established flood stage.
3. Adequately secured from floating by other means

4.3.2.6.3 Tank vents or other openings that are not liquid tight shall extend above the maximum flood stage water level.

4.3.2.6.4 A dependable water supply shall be available for filling an empty or partially filled tank.

Exception: Where filling the tank with water is impractical or hazardous because of the contents of the tank, the tank shall be protected by other means against movement or collapse.

4.3.2.6.5 Spherical or spheroid tanks shall be protected by any of the methods specified in this subsection.

4.3.2.7 Collision Protection. Where a tank might be exposed to vehicular damage, protection shall be provided to prevent damage to the tank.

4.3.2.8 Installation Instructions. Factory-built aboveground tanks shall be provided with instructions for testing and for installation of the normal and emergency vents.

4.4 Testing Requirements for Tanks.

4.4.1 Initial Testing. All tanks, whether shop-built or field erected, shall be tested before they are placed in service in accordance with the applicable requirements of the code under which they were built.

4.4.1.1 An approved listing mark on a tank shall be considered to be evidence of compliance with this requirement. Tanks not marked in accordance with this subsection shall be tested before they are placed in service in accordance with good engineering principles or in accordance with the requirements for testing in the codes listed in 4.2.3.1.1, 4.2.3.2.1, or 4.2.3.3.1.

4.4.1.2 Where the vertical length of the fill and vent pipes is such that, when filled with liquid, the static head imposed on the bottom of the tank exceeds 10 psig (69 kPa), the tank and its related piping shall be tested hydrostatically to a pressure equal to the static head thus imposed. In special cases where the height of the vent above the top of the tank is excessive, the hydrostatic test pressure shall be determined by using recognized engineering practice.

4.4.1.3 Before the tank is initially placed in service, all leaks or deformations shall be corrected in an acceptable manner. Mechanical caulking shall not be permitted for correcting leaks in welded tanks except for pinhole leaks in the roof.

4.4.1.4 Tanks to be operated at pressures below their design pressure shall be tested by the applicable provisions of 4.4.1.1 or 4.4.1.2 based upon the pressure developed under full emergency venting of the tank.

4.4.2* Tightness Testing. In addition to the tests called for in 4.4.1, all tanks and connections shall be tested for tightness after installation and before being placed in service in accordance with 4.4.2.1 through 4.4.2.4, as applicable. Except for underground

tanks, this test shall be made at operating pressure with air, inert gas, or water. Air pressure shall not be used to test tanks that contain flammable or combustible liquids or vapors. *(See Section 6.6 for testing pressure piping.)*
Exception: FM field-erected tanks, the tests required by 4.4.1.1 *or* 4.4.1.2 *shall be permitted to be considered the test for tank tightness.*

4.4.2.1 Horizontal shop-fabricated aboveground tanks shall be tested for tightness either hydrostatically or with air pressure at not less than 3 psig (gauge pressure of 20.6 kPa) and not more than 5 psig (gauge pressure of 34.5 kPa). Vertical shop-fabricated aboveground tanks shall be tested for tightness either hydrostatically or with air pressure at not less than 1.5 psig (gauge pressure of 10.3 kPa) and not more than 2.5 psig (gauge pressure of 17.3 kPa).

4.4.2.2 Single-wall underground tanks and piping, before being covered, enclosed, or placed in use, shall be tested for tightness either hydrostatically or with air pressure at not less than 3 psig (gauge pressure of 20.6 kPa) and not more than 5 psig (gauge pressure of 34.5 kPa).

4.4.2.3 Underground secondary containment tanks and horizontal aboveground secondary containment tanks shall have the primary (inner) tank tested for tightness either hydrostatically or with air pressure at not less than 3 psig (gauge pressure of 20.6 kPa) and not more than 5 psig (gauge pressure of 34.5 kPa). The interstitial space (annulus) of such tanks shall be tested either hydrostatically or with air pressure at 3 to 5 psig (gauge pressure of 20.6 to 34.5 kPa), by vacuum at 5.3 in. Hg (17.9 kPa), or in accordance with the tank's listing or manufacturer's instructions. The pressure or vacuum shall be held for not less than 1 hour or for the duration specified in the listing procedures for the tank. Care shall be taken to ensure that the interstitial space is not over pressured or subjected to excessive vacuum.

4.4.2.4 Vertical aboveground secondary containment-type tanks shall have their primary (inner) tank tested for tightness either hydrostatically or with air pressure at not less than a gauge pressure of 10 kPa (1.5 psig) and not more than a gauge pressure of 17 kPa (2.5 psig). The interstitial space (annulus) of such tanks shall be tested either hydrostatically at a gauge pressure of 10 to 17 kPa (1.5 to 2.5 psig), by vacuum at 18 kPa (5.3 in Hg), or in accordance with the tank's listing or manufacturer's instructions. The pressure or vacuum shall be held for 1 hour without evidence of leaks. Care shall be taken to ensure that the interstitial space is not over pressured or subjected to excessive vacuum.

4.4.3* Additional Testing. Tanks that have been relocated, structurally damaged, repaired, or are suspected of leaking shall be tested in a manner acceptable to the authority having jurisdiction.

4.5.3.4* Static Electricity. All equipment such as tanks, machinery, and piping shall be designed and operated to prevent electrostatic ignitions. All metallic equipment where an ignitable mixture could be present shall be bonded or grounded. The bond or ground or both shall be physically applied or shall be inherently present by the nature of the

installation. Any electrically isolated section of metallic piping or equipment shall be bonded or grounded to prevent hazardous accumulation of static electricity. All nonmetallic equipment and piping where an ignitable mixture could be present shall be given special consideration.

4.5.3.5 Electrical Installations. Design, selection, and installation of electrical wiring and electrical utilization equipment shall meet the requirements of Chapter 6 of the 2003 Edition of NFPA 30.

4.5.7 Inspection and Maintenance.

4.5.7.1 All fire protection equipment shall be properly maintained and periodic inspections and tests shall be done in accordance with both standard practice and equipment manufacturer's recommendations.

4.5.7.2 Maintenance and operating practices at tank storage facilities shall control leakage and prevent spillage of liquids.

2.5.7.3 Ground areas around tank storage facilities shall be kept free of weeds, trash, or other unnecessary combustible materials.

4.5.7.4 Access ways established for movement of personnel shall be maintained clear of obstructions to permit orderly evacuation and ready access for manual fire fighting.

4.5.7.5 Combustible waste material and residues in operating areas shall be kept to a minimum, stored in covered metal containers, and disposed of daily.

4.6.4 Temporary or Permanent Removal from Service of Aboveground Tanks.

4.6.4.1 * Closure of Storage Tanks. Aboveground tanks taken out of service or abandoned shall be emptied of liquid, rendered vapor-free, and safeguarded against trespassing.

4.6.4.2 Reuse of Aboveground Storage Tanks. Only those used tanks that comply with the applicable sections of this code and are approved by the authority having jurisdiction shall be installed for flammable or combustible liquids service.

4.6.7 Tank Maintenance.

4.6.7.1* Each tank shall be inspected and maintained to ensure compliance with the requirements of this code. Testing requirements for tanks shall be in accordance with Section 4.4

4.6.7.2 Each tank shall be maintained liquid tight. Each tank that is leaking shall be emptied of liquid or repaired in a manner acceptable to the authority having jurisdiction.

4.6.7.3 Tanks that have been structurally damaged, have been repaired or reconstructed, or are suspected of leaking shall be tested in accordance with 4.4.1 or in a manner acceptable to the authority having jurisdiction.

4.6.7.4* Tanks and all tank appurtenances, including normal vents and emergency vents and related devices, shall be properly maintained to ensure that they function as intended.

4.6.7.5 Openings for gauging on tanks storing Class I liquids shall be provided with a vapor tight cap or cover. Such covers shall be closed when not gauging.

Chapter 5 Piping Systems

5.1 Scope.

5.1.1 This chapter shall apply to piping systems consisting of pipe, tubing, flanges, bolting, gaskets, valves, fittings, flexible connectors, the pressure-containing parts of other components such as expansion joints and strainers, and devices that serve such purposes as mixing, separating, snubbing, distributing, metering, controlling flow, or secondary containment of liquids and associated vapors.

5.1.2 This chapter shall not apply to any of the following:

(1) Tubing or casing on any oil or gas wells and any piping Connected directly thereto
(2) Motor vehicles, aircraft, boats, or piping that are integral To a stationary engine assembly
(3) Piping within the scope of any applicable boiler and pres- Sure vessel code

5.2 General Requirements.

5.2.1 Performance Standards. The design, fabrication, assembly, test, and inspection of piping systems shall be suitable for the expected working pressures and structural stresses. Compliance with applicable sections of ASME B31, *Code for Pressure Piping,* and the provisions of this chapter shall be considered prima facie evidence of compliance with the foregoing provisions.

5.2.2 Tightness of Piping. Piping systems shall be maintained liquid tight. A piping system that has leaks that constitute a hazard shall be emptied of liquid or repaired in a. manner acceptable to the authority having jurisdiction.

5.3 Materials for Piping Systems.

5.3.1 Material Specifications. Pipe, valves, faucets, couplings, flexible connectors, fittings, and other pressure-containing parts shall meet the material specifications and pressure and temperature limitations of ASME B31, *Code for Pressure Piping,* except as provided for in 5.3.2, 5.3.3, and 5.3.4.

5.3.2 Ductile Iron. Ductile (nodular) iron shall meet the specifications of ASTM A 395, *Ferritic Ductile Iron Pressure Retaining Castings for Use at Elevated Temperatures.*

5.3.3 Materials of Construction of Valves. Valves at storage tanks, as required by 4.3.2.5.1 and 4.3.4.7.3, and their connections to the tank shall be of steel or ductile iron, except as provided for in 5.3.3.1, 5.3.3.2, or 5.3.4.

5.3.3.1 Valves at storage tanks shall be permitted to be other than steel or ductile iron where the chemical characteristics of the liquid stored are not compatible with steel or where the valves are installed internally to the tank. Valves installed externally to the tank shall be permitted to be other than steel or ductile iron if the material of construction has a ductility and melting point comparable to steel or ductile iron and is capable of withstanding the stresses and temperatures involved in fire exposure or the valves are otherwise protected from fire exposures, such as by materials having a fire resistance rating of not less than 2 hours.

5.3.2 Cast iron, brass, copper, aluminum, malleable iron, and similar materials shall be permitted to be used on tanks described in 4.3.2.2.1 or on tanks storing Class IIIB liquids where the tanks are located outdoors and not within a diked area or drainage path of a tank storing a Class I, Class II, or Class IIIA liquid.

5.3.4 Low Melting Point Materials. Low melting point materials such as aluminum, copper, and brass; materials that soften on fire exposure such as plastics; or nonductile material such as cast iron shall be permitted to be used underground within the pressure and temperature limitations of ASME B31, *Code for Pressure Piping.*

5.3.4.1 Such materials shall be permitted to be used outdoors above ground or inside buildings provided they meet one of the following conditions.

(1) They are resistant to damage by fire
(2) They are located so that any leakage resulting from failure will not unduly expose persons, important buildings, or structures
(3) They are located where leakage can readily be controlled by operation of one or more accessible remotely located valves

5.3.4.2 The piping materials chosen shall be compatible with the liquids being handled. Piping systems of these materials shall be designed and built in accordance with recognized standards of design for the particular materials chosen or with acceptable equivalent standards or shall be listed.

5.3.5 Lining Materials. Piping, valves, and fittings shall be permitted to have combustible or noncombustible linings.

5.3.6 Nonmetallic Piping. Piping systems of nonmetallic materials, including piping systems incorporating secondary containment, shall be designed and built in accordance with recognized standards of design or approved equivalents and shall be installed in accordance with53.3.4. Nonmetallic piping shall be built and used within the scope of their approvals or within the scope of UL 971, *Standard for Nonmetallic Underground Piping for Flammable Liquids.* Nonmetallic piping systems and components shall be installed in accordance with manufacturers' instructions.

5.4 Pipe Joints.

5.4.1 Tightness of Pipe Joints. Joints shall be made liquid tight and shall be welded,

flanged, threaded, or mechanically attached. They shall be designed and installed so that the mechanical strength of the joint will not be impaired if exposed to a fire. Threaded joints shall be made with a suitable thread sealant or lubricant. Joints in piping systems handling Class I liquids shall be welded when located in concealed spaces within buildings.

5.4.2 Flexible Connectors. Listed flexible connectors shall be permitted to be used where installed in accordance with 5.4.3.

3.4.3 Friction Joints. Pipe joints dependent upon the friction characteristics or resiliency of combustible materials for mechanical continuity or liquid tightness of piping shall only be used outside of buildings above ground or below ground. Where used above ground, either the piping shall be secured to prevent disengagement at the fitting, or the piping system shall be so designed that any spill resulting from disengagement could not unduly expose persons, important buildings, or structures and could be readily controlled by remote valves.

Exception: Pipe joints that depend on friction characteristics of their components shall be permitted to be used inside buildings provided both of the following are met:

(a) They are located where leakage can be readily controlled by operation of an accessible remotely located valve that is outside the fire risk area.

(b) The mechanical strength and liquid tightness of the joint is not dependent on the resiliency of a combustible material or component.

5.5 Installation of Piping Systems.

5.5.1 General. Piping systems shall be substantially supported and protected against physical damage and excessive stresses arising from settlement, vibration, expansion, or contraction. The installation of nonmetallic piping shall be in accordance with the manufacturer's instructions.

5.5.2* Load-Bearing Supports. Load-bearing piping supports that are located in areas with a high fire exposure risk shall be protected by one or more of the following:

(1) Drainage to a safe location to prevent liquid from accu-mulating under pipe ways
(2) Fire-resistive construction
(3) Fire-resistant protective coatings or systems
(4) Water spray systems designed and installed in accordance with NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*
(5) Other alternate means acceptable to the authority having jurisdiction

5.5.3 Pipe Penetrations. Piping that passes through or pierces a dike wall or the wall of a structure shall be designed to prevent excessive stresses and leakage due to settlement or fire exposure.

5.5.4* Protection Against Corrosion. Aboveground piping systems that are subject to external corrosion shall be suitably protected. Underground piping systems shall be protected against corrosion in accordance with 4.2.6.

5.5.5 Underground Piping.

5.5.5.1 Underground piping shall be installed on a bedding of at least 6 in. (150 mm) of well -compacted backfill material.

5.5.5.2 In areas subject to vehicle traffic, the pipe trench shall be of sufficient depth to permit a cover of at least 18 in. (450 mm) of well-compacted backfill material and pavement. In paved areas where a minimum 2 in. (50 mm) of asphalt is used, backfill between the pipe and the asphalt can be reduced to 8 in. (200 mm) minimum. In paved areas where a minimum 4 in. (100 mm) of reinforced concrete is used, backfill between the pipe and the concrete can be reduced to 4 in. (100 mm) minimum.

5.5.5.3 In areas not subject to vehicle traffic, the pipe trench shall be of sufficient depth to permit a cover of at least 6 in. (150 mm) of well-compacted backfill material. A greater burial depth shall be provided when required by the manufacturer's instructions or where frost conditions are present.

5.5.5.4 Piping within the same trench shall be separated by two pipe diameters. Piping shall not need to be separated horizontally by more than 9 in. (230 mm).

5.5.5.5 Two or more levels of pipes within the same trench shall be separated vertically by a minimum 6 in. (150 mm) of well-compacted backfill.

5.5.6 Valves. Piping systems shall contain a sufficient number of valves to operate the system properly and to protect the equipment. Piping systems in connection with pumps shall contain a sufficient number of valves to properly control the flow of liquid both in normal operation and in the event of physical damage. Each connection to a piping system by which equipment such as tank cars, tank vehicles, or marine vessels discharges liquids into storage tanks shall be provided with a check valve for automatic protection against back-flow if the piping arrangement is such that back-flow from the system is possible. *(See also* 2.3.2.5.1.)

5.5.7 Common Loading and Unloading Piping. If loading and unloading is done through a common pipe system, a check valve shall not be required. However, an isolation valve shall be provided. This valve shall be located so that it is readily accessible or shall be remotely operable.

5.6 Testing.

5.6.1 Initial Testing. Unless tested in accordance with the applicable sections of ASME B31, *Code for Pressure Piping,* all piping shall be tested before being covered, enclosed, or placed in use. Testing shall be done hydrostatically to 150 percent of the maximum anticipated pressure of the system or pneumatically to 110 percent of the maximum anticipated pressure of the system, and the test pressure shall be maintained for a sufficient time to conduct a complete visual inspection of all joints and connections. In no case shall the test pressure be less than 5 psig (gauge pressure of 34.5 kPa) measured at the highest point of the system, and in no case shall the test pressure be maintained for less than 10 minutes.

5.6.2 Initial Testing of Secondary Containment Piping. The interstitial (annular) space

of secondary containment-type piping shall be tested hydrostatically or with air pressure at 5 psig (gauge pressure of 34.5 kPa) or shall be tested in accordance with its listing or with the manufacturer's instructions. The pressure source shall be disconnected from the interstitial space to ensure that the test is being conducted on a closed system. The pressure shall be maintained for a minimum of 1 hour.

5.6.3 Testing During Maintenance. Existing piping shall be tested in accordance with this subsection if there is indication that the piping is leaking. Piping that could contain a Class I, Class II, or Class IIIA liquid or vapor shall not be tested using air.

5.7 Vent Piping. Vent piping shall be designed, constructed, and installed in accordance with this section.

5.7.1 Vent Piping for Aboveground Tanks.

5.7.1.1 Where the outlets of vent pipes for tanks storing Class I liquids are adjacent to buildings or public ways, they shall be located so that vapors are released at a safe point outside of buildings and not less than 12 ft (3.6 m) above the adjacent ground level. Vapors shall be discharged upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions and shall be at least 5 ft (1.5 m) from building openings.

5.7.1.2 Manifolding of vent piping shall be avoided except where required for special purposes such as vapor recovery, vapor conservation, or air pollution control. Where vent piping is manifolded, pipe sizes shall be capable of discharging, within the pressure limitations of the system, the vapors they are required to handle when all manifolded tanks are subject to the same fire exposure.

5.7.1.3 Vent piping for tanks storing Class I liquids shall not be manifolded with vent piping for tanks storing Class II or Class III liquids unless positive means are provided to prevent the following:

(1) Vapors of Class I liquids from entering tanks storing Class II or Class III liquids
(2) Contamination *(see A.1.2)*
(3) Possible change in classification of the less volatile liquid

5.7.1.4* Extension of Emergency Vent Piping. Piping to or from approved emergency vent devices for atmospheric and low-pressure tanks shall be sized to provide emergency vent flows that limit the back pressure to less than the maximum pressure permitted by the design of the tank. Piping to or from approved emergency vent devices for pressure vessels shall be sized in accordance with the ASME *Boiler and Pressure Vessel Code.*

APPLYING FOR OVERSIZE/OVERWEIGHT PERMITS FOR DIVISIBLE LOADS

GENERAL INFORMATION:

Effective July 1, 2010, F.S. 316.550(4)a will allow the Department of Transportation to issue permits authorizing commercial vehicles (hauling divisible loads) to operate off the interstate highway system with a 10% increase to the vehicles legal gross weight limit as described in F.S. 316.535(5).

The increase in weight allowed under F.S. 316.550(4) a does not allow haulers to increase any vehicle dimensions by multi-loading to create any overdimension.

TYPES OF PERMITS ISSUED:

Trip: Valid from one point of origin to one destination and the hauler is allowed 5 days to make the move. These permits are faxed to the customer within a few business hours of receipt of a complete application.

Blanket: Valid for multiple trips for 1 year from the date of issuance. Although these permits cannot be photocopied for hauling purposes, they are interchangeable from one truck to another truck (using the original only). These permits can only be mailed or picked up from the Permit Office located at 2740 Centerview Dr. Suite 1-C, Tallahassee, FL 32301.

COMPLETING THE APPLICATION:

This is the most important part of the process because it is your opportunity to relay information about your vehicle and load to the Permit Office. Form #850-040-02 must be completed in order to apply for a permit and an example of a completed application may be found at www.fdotmaint.com/permit . Please be aware that any misinformation or lack of information may cause delays in the processing of your application. In addition to contact and invoicing information, the following information must be completed when applying for a permit:

- Select the vehicle configuration which best describes your power unit and trailer then, provide the type of load to be hauled on the line next to the vehicle description. Please select only one vehicle configuration.
- Select the box for divisible load next to the vehicle configuration.
- Provide the overall length (including any overhang), width and height in the appropriate fields on the application.
- Provide individual axle spacings and weights in the appropriate fields on the application.
- Provide the city which you are travelling to and from and the route of travel (Trip permit applications only)

FEES:
Trip = $0.27/per mile
Blanket = $240/year

PERMIT UTILIZATION:
Once you have received your permit, be sure to read it very carefully to ensure that the information provided on your application matches that of the permit. Also, carefully read all permit conditions to ensure compliance with your permit.

All divisible load permits will be allowed to operate at the maximum limit allowed per F.S. 316.550(4) a and F.S. 316.535(5). These vehicles can only be operated off the interstate highway system. Axle weight limitations will be inclusive of any tolerances and as follows: 22,000 lbs. on any single axle, 44,000 lbs. on any two (tandem) axles and 60,000 lbs. on any three (tri) axles. Trip permit applications are route specific and the route must be provided by the applicant. The Permit Office will analyze the route for weight restrictions. Blanket permits may be transferred from vehicle to vehicle however, the permit cannot be duplicated and the identity of the load (e.g. produce, beverages, etc.) must be the same. A table will be provided with each blanket permit in order for the hauler to determine their allowable gross vehicle weight. Blanket permit holders must also operate under TTT Map # 1. The map will display circles which indicate those structures which cannot be crossed by your vehicle configuration. TTT Map # 1 and an example of the table can be found at www.fdotmaint.com/permit

REGISTRATION:
Vehicles must be registered properly for weight. You may contact the Florida Department of Highway Safety and Motor Vehicles www.flhsmv.gov for more information.

PENALTIES:
There will be no tolerance allowed beyond your permitted weight limits. Vehicles may be required to off-load when the weight(s) of the permit are exceeded. Penalties will be assessed in accordance with Florida Administrative Code (FAC) 14-26. The Office of Motor Carrier Compliance website is www.dot.state.fl.us/mcco/

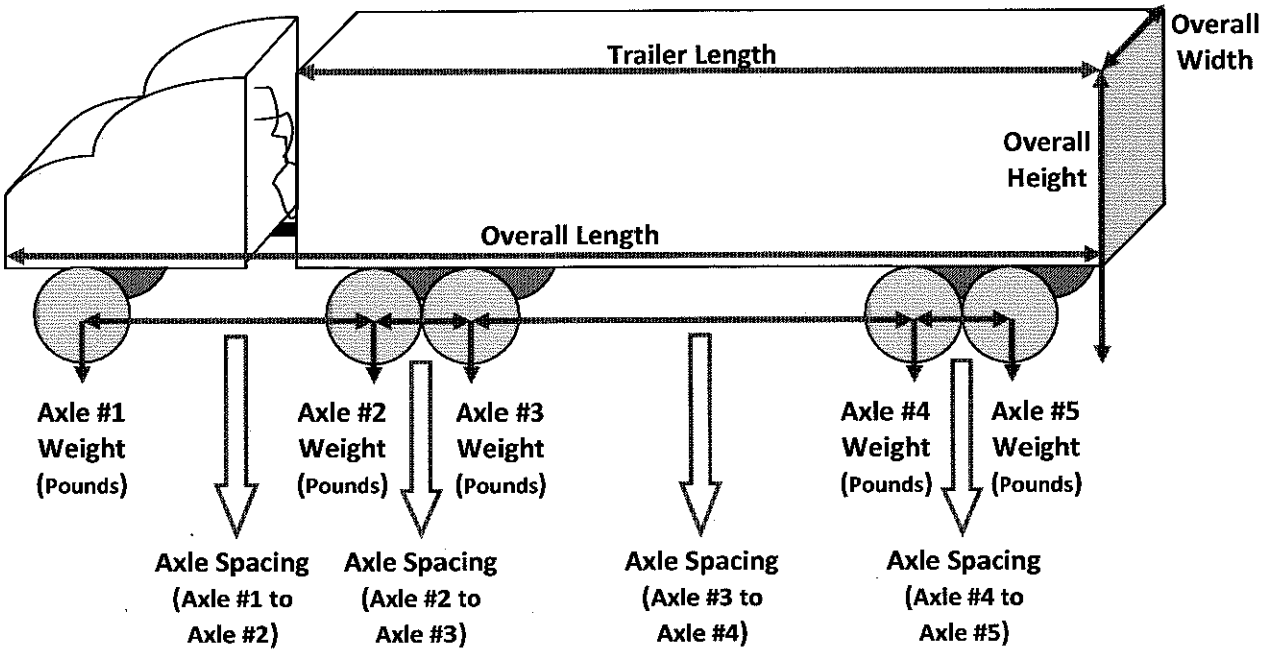
PERMIT OFFICE INFORMATION:

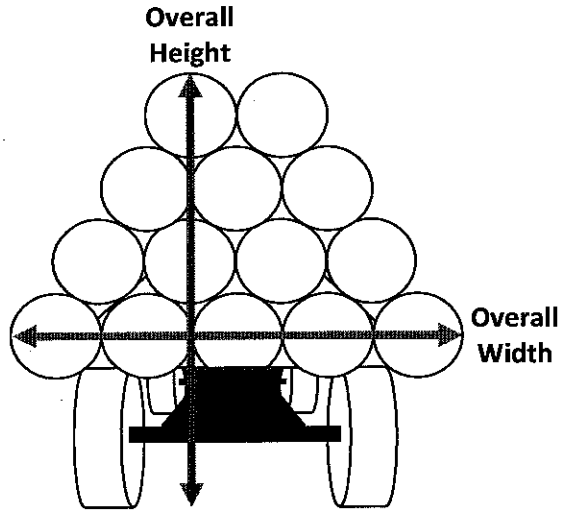
Mailing Address:
Florida Department of Transportation
605 Suwannee St. MS 62
Tallahassee, FL 32399

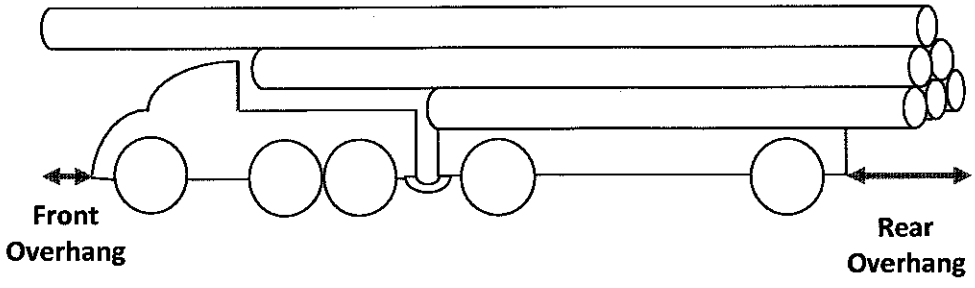
Overnight Address:
Florida Department of Transportation
2740 Centerview Dr. Suite 1-C
Tallahassee, FL 32301

To apply for permits or view other permit information, visit our website at www.fdotmaint.com/permit

How to Measure a Truck's Dimensions







DIVISIBLE LOAD WEIGHT TABLE

HOW TO USE THE TABLE BELOW:

1. Select the row which describes your external bridge (wheelbase) measured between the center of the steer axle (first) on the power unit (truck) to the center of the last axle on the trailer.
2. Follow it across to the column which represents the total number of axles for both your truck and trailer.
3. The weight in this box is the maximum weight which you can haul with a permit (including all tolerances).

Distance (Feet)	2 Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	Distance (Feet)
4	44000						4
5	44000						5
6	44000						6
7	44000						7
8	44000						8
9	44000	47000					9
10	44000	48000					10
11	44000	48500					11
12	44000	49500					12
13	44000	50500	55500				13
14	44000	51000	56500				14
15	44000	52000	57000				15
16	44000	53000	58000				16
17	44000	53500	58500	64500			17
18	44000	54500	59500	65000			18
19	44000	55500	60000	66000			19
20	44000	56000	61000	66500			20
21	44000	57000	61500	67000	73500		21
22	44000	58000	62500	68000	74000		22
23	44000	58500	63000	68500	74500		23
24	44000	59500	64000	69500	75000		24
25	44000	60000	64500	70000	76000	82000	25
26	44000	61000	65500	70500	76500	82500	26
27	44000	62000	66000	71500	77000	83500	27
28	44000	62500	66500	72000	78000	84000	28
29	44000	63500	67500	72500	78500	84500	29
30	44000	64500	68000	73500	79000	85500	30
31	44000	65000	69000	74000	80000	86000	31
32	44000	66000	69500	75000	80500	86500	32
33	44000		70500	75500	81000	87000	33
34	44000		71000	76000	82000	88000	34
35	44000		72000	77000	82500		35

36	44000	72500	77500	83000	36
37	44000	73500	78000	84000	37
38	44000	74000	79000	84500	38
39	44000	75000	79500	85000	39
40	44000	75500	80500	86000	40
41	44000	76500	81000	86500	41
42	44000	77000	81500	87000	42
43	44000	77500	82500	88000	43
44	44000	78500	83000		44
45	44000	79000	83500		45
46	44000	80000	84500		46
47	44000	80500	85000		47
48	44000	81500	86000		48
49	44000	82000	86500		49
50	44000	83000	87000		50
51	44000	83500	88000		51
52	44000	84500			52
53	44000	85000			53
54	44000	86000			54
55	44000	86500			55
56	44000	87500			56
57	44000	88000			57

Rule 14-26.00411, F.A.C.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FORM 850-040-02
MAINTENANCE
OGC 08/09

REQUEST FOR SPECIAL ROAD USE OVERSIZE / OVERWEIGHT PERMIT APPLICATION

Fax(850) 410-5779 Phone (850) 410-5777 or visit www.fdotmaint.com/permitnew for more information or to apply online.

APPLICATION INFORMATION – Please select type of permit needed and quantity. Trip permits require a separate application for each load.
✓ TRIP (single load, valid for 5 days, specific route) ___ BLANKET (specific vehicle configuration, valid for 1 year) QUANTITY 1

CONTACT INFORMATION – Please provide information requested below.
PERMITEE NAME: Anybody's Trucking Service
INVOICE NAME: N/A
MAILING ADDRESS: 123 Easy St.
CITY, STATE, ZIP: Tallahassee, FL 32399
PHONE NUMBER: (888) 888 - 8888
FAX NUMBER: (888) 888 - 8888
EMAIL ADDRESS: Anybody Trucking@aol.com

PAYMENT METHOD – Please select one of the following payment methods. For additional payment information please see page 2.
___ CHECK ___ CASH ___ MONEY ORDER ✓ CREDIT CARD ARI / ESCROW

ROUTING INFORMATION – To be completed only for a trip permit
PRE AUTHORIZATION CODE # N/A
FROM (CITY): Tampa TO (CITY): Orlando
ROUTE: I275 - I4 - SR50 - SR528
___ RETURN TRIP NEEDED

VEHICLE CONFIGURATION – Select the configuration which applies and describe the load as needed. Is this a Divisible Load?
✓ TRUCK TRACTOR SEMITRAILER HAULING: Beverages. ✓ Yes ___ No
___ TRUCK TRACTOR WITH 48(+)' – 53' SEMITRAILER WITH KINGPIN SETTING > 41'. ___ Yes ___ No
___ TRUCK TRACTOR WITH SEMITRAILER OVER 53' BUT NOT GREATER THAN 57'6". ___ Yes ___ No
___ STRAIGHT TRUCK TOWING OR TOWING A TRAILER CARRYING: ___. ___ Yes ___ No
___ STRAIGHT TRUCK HAULING: ___.
___ MOBILE HOME – MAKE: ___ SERIAL NUMBER (LAST 4 DIGITS): ___.
___ SEALED CONTAINERIZED CARGO UNIT – SEAL NUMBER (LAST 4 DIGITS): ___.
___ WRECKER TOWING A DISABLED VEHICLE.
___ SELF PROPELLED: ___.
___ INNERBRIDGE
___ TRUCK TRACTOR SEMITRAILER HAULING AUTOS ___ STINGER STEERED ___ NON-STINGER STEERED

IDENTITY OF LOAD – Please select type of identity and provide number.
✓ TRUCK OR TRAILER TAG # ___ LOAD ID # ___ TRAILER OR TRUCK UNIT # ___ BILL OF LADING # ___ VIN # ON EQUIPMENT
NUMBER: XXX 123

TRUCK DIMENSIONS – Please provide all vehicle dimensions.
OVERALL HEIGHT: 13 ft 6 in
OVERALL WIDTH: 8 ft 6 in
OVERALL LENGTH: 70 ft 0 in
TRAILER LENGTH: 48 ft 0 in
FRONT OVERHANG: 0 ft 6 in
REAR OVERHANG: 0 ft 0 in

TRUCK CONFIGURATION – The following must be completed for overweight vehicles or marked as legal when axle/gross weight is legal. Attach additional pages as needed.

AXLE SPACINGS		AXLE WEIGHTS	
1 to 2	12 ft 1 in	Axle 1	13,000 lbs
2 to 3	5 ft 6 in	Axle 2	18,750 lbs
3 to 4	37 ft 0 in	Axle 3	18,750 lbs
4 to 5	5 ft 6 in	Axle 4	18,750 lbs
5 to 6	___ ft ___ in	Axle 5	18,750 lbs
6 to 7	___ ft ___ in	Axle 6	___ lbs
7 to 8	___ ft ___ in	Axle 7	___ lbs
8 to 9	___ ft ___ in	Axle 8	___ lbs
9 to 10	___ ft ___ in	Axle 9	___ lbs
10 to 11	___ ft ___ in	Axle 10	___ lbs
11 to 12	___ ft ___ in	Axle 11	___ lbs
12 to 13	___ ft ___ in	Axle 12	___ lbs
13 to 14	___ ft ___ in	Axle 13	___ lbs
14 to 15	___ ft ___ in	Axle 14	___ lbs
		Axle 15	___ lbs

AXLE CONFIGURATION – Complete for Cranes or loads greater than 199,000 lbs.

# OF TIRES PER AXLE	TIRE WIDTH
1. ___	___ in
2. ___	___ in
3. ___	___ in
4. ___	___ in
5. ___	___ in
6. ___	___ in
7. ___	___ in
8. ___	___ in
9. ___	___ in
10. ___	___ in
11. ___	___ in
12. ___	___ in
13. ___	___ in
14. ___	___ in
15. ___	___ in

OFFICE USE ONLY – Do not write anything in this space.
CLASS: S N E
1 2 3 4
PERMIT FEE: ___
AXLE CODE: ___
DIMENSION CODE: ___
MIN O.B. REQUIRED: ___
TECH INITIALS: ___
SPECIAL NOTES: ___

TOTAL # OF AXLES: 5
TOTAL OUTERBRIDGE: 59 ft 1 in
TOTAL GROSS WEIGHT: 88,000 lbs
APPLICANT NAME AND DATE: ___

*** PLEASE BE AWARE THAT APPLICATION FOR AN OVERSIZE / OVERWEIGHT PERMIT DOES NOT SATISFY REQUIREMENTS FOR OBTAINING PERMITS FROM OTHER AGENCIES (E.G. IFTA, IRP, FEDERAL DOT NUMBER, ETC.). FOR MORE INFORMATION VISIT WWW.MYFLORIDA.COM