DEPARTMENT OF TRANSPORTATION

Office of the Secretary

33 CFR Part 137

RIN 2105–AC01

Limit of Liability for Deepwater Ports

AGENCY: Department of Transportation.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Department of Transportation proposes to establish a limit of liability for deepwater ports in general and for the Louisiana Offshore Oil Port (LOOP) specifically. These limits apply only to certain negligent oil spills for which a deepwater port would be entitled to limit its liability under section 1004 of the Oil Pollution Act of 1990 (OPA 90) (33 U.S.C. 2704). The proposed limits do not alter a deepwater port's unlimited liability for spills caused by gross negligence, willful misconduct, or violation of certain Federal regulations. LOOP is the only U.S. deepwater port in operation at this time; specific liability limits for other, future deepwater ports will be established through separate rulemakings as necessary.

DATES: Comments must be received on or before April 10, 1995.

ADDRESSES: Comments may be mailed to Docket 50112, Office of Documentary Services (C–55), U.S. Department of Transportation, PL–401, Northeast Corner, 400 Seventh Street, SW., Washington, DC 20590–0001. To expedite consideration of the Docket, please submit an original and five copies. Certain studies referenced in this notice may be ordered from the National Technical Information Service, Springfield, VA 22161; phone orders (703) 487–4650 (Visa, Mastercard and American Express accepted).

FOR FURTHER INFORMATION CONTACT: For general questions, contact Mr. Robert Stein, OST/P–13, at (202) 366–4846. For engineering questions, contact Mr. Thomas Jordan, U.S. Coast Guard OPA 90 Staff, at (202) 267–6751.

SUPPLEMENTARY INFORMATION:

Request for Comments

This notice of proposed rulemaking (NPRM) presents three proposed options within a $50 million to $350 million range for LOOP's limit of liability. The Department of Transportation seeks public comment on the issue of limits of liability for deepwater ports in general and LOOP in particular. We have numbered specific discussion paragraphs throughout this NPRM and would appreciate it if commenters would reference those numbers in their responses.

The Department plans no public hearing. Persons may request a public hearing by writing to the address listed under **ADDRESSES**. The request should include reasons why a hearing would be beneficial. If the Department determines that the opportunity for oral presentations will aid this rulemaking, it will hold a public hearing at a time and place announced by a later notice in the **Federal Register**.

Statutory Basis and Purpose

The purpose of this regulatory action is to establish an appropriate limit of liability for deepwater ports in accordance with section 1004 of OPA 90.

Section 1004 sets the limit of liability for deepwater ports at $350 million. However, it also allows the limit to be adjusted to a lower amount as appropriate (but not less than $50 million), subject to a study of the relative operational and environmental risks of transporting oil to the United States by deepwater ports compared to other ports.

The relative risk study, entitled the ''Deepwater Ports Study,'' has been completed and forwarded to Congress. The study concluded that deepwater ports represent a lower operational and environmental risk for delivering crude oil to the United States than the three other common modes of crude oil delivery (direct vessel deliveries, lightering, and offshore mooring stations).

At present, the only deepwater port in operation in the United States is LOOP. However, other deepwater ports may be built in the future. Because there may be significant engineering and environmental differences between different deepwater ports, the Department has determined that it is necessary to review any deepwater port individually before setting its limit of liability within the statutory limits of $50 million and $350 million. Limits for other deepwater ports may be different from LOOP's limit.

Therefore, in accordance with its authority under section 1004(d)(2)(C) of OPA 90 (33 U.S.C. 2704(d)(2)(C)), and for reasons explained in this preamble, the Department proposes to establish an appropriate limit of liability for LOOP.

Background and Discussion of Proposed Regulations

1. Deepwater Ports

A deepwater port is a man-made offshore marine terminal located in waters deep enough to accommodate Very Large and Ultra Large Crude Carrier tankers (VLCCs and ULCCs) that are too large to enter the local mainland port. A deepwater port marine terminal generally consists of several tanker mooring buoys connected by seafloor pipelines to a nearby pumping platform. The pumping platform is connected by seafloor pipeline(s) to a mainland terminal. A tanker at a mooring buoy pumps its cargo oil to the pumping platform, which then pumps the oil ashore. The marine terminal complex typically contains operating stations, booster pumps, control valves and manifolds, crew accommodations (feeding and berthing), helicopter pad, radar and communication facilities, and on-site pollution response equipment.

Although there are several deepwater ports around the world, at the present time there is only one in the United States: the Louisiana Offshore Oil Port, located in the Gulf of Mexico approximately 18 miles off the Louisiana coast.

2. Louisiana Offshore Oil Port (LOOP)

The LOOP deepwater port has been in operation since May, 1981. The total LOOP complex consists of the offshore marine terminal (pumping platform, control platform, and three tanker mooring buoys with pipelines connecting to the pumping platform), the 21-mile offshore pipeline (connecting the marine terminal to a booster station on the beach), the 22-mile onshore pipeline (crossing Mississippi River delta bayous and marshes), an underground salt dome storage facility, and overland pipelines connecting LOOP to various other inland pipeline systems. As defined by the Deepwater Ports Act (Pub. L. 93–627), however, only LOOP's marine terminal (including operations at the terminal) and offshore pipeline are considered to be the actual deepwater port. Therefore, the onshore portions of the complex are not covered by this rulemaking.

LOOP is strictly a crude oil off-loading facility, receiving cargo oil from tankers and pumping it ashore to the Clovelly Dome storage facility. In 1992, crude oil deliveries to LOOP averaged 816,000 barrels per day, accounting for 15 percent of the total amount delivered by vessel to the United States for that year (excluding Alaskan crude oil deliveries).

In the 12 years that LOOP has been in operation a total of 894 barrels of oil have been spilled from the deepwater port portion of LOOP, the largest spill being 399 barrels (from data through December 31, 1992).

3. Deepwater Ports Study

Section 1004(d) of OPA 90 directs the Secretary to conduct a study of the relative operational and environmental risks posed by the marine transportation of oil to deepwater ports versus other ports. If that study finds that the risks are lower at deepwater ports, then the Secretary is to initiate a rulemaking that establishes an appropriate level of liability for deepwater ports (but not less than $50 million). The Deepwater Ports Study has been completed and forwarded to Congress. A copy of the study is available for reading in the public docket for this rulemaking, and additional copies may be ordered from the National Technical Information Service (publication number PB94–124054; see **ADDRESSES** section of this notice for more details).

The Deepwater Ports Study examined the four basic modes of delivering crude oil to ports in the United States: (1) Direct vessel deliveries, by tankers small enough to enter U.S. ports directly; (2) lightering, whereby tankers too large to enter port are off-loaded at offshore locations onto smaller tankers or barges that carry the oil cargo into port; (3) offshore mooring stations, whereby tankers moor at a special buoy generally located within two miles of the beach and pump their cargo ashore through seafloor pipelines; and (4) deepwater ports.

The study concluded that crude oil deliveries via deepwater ports represent a lower risk to the environment than the other three delivery modes. This is principally because the delivery tankers remain far offshore, well away from most environmentally-sensitive waters, and because the seafloor pipeline is relatively protected from the kinds of damage that cause large oil spills. Furthermore, the total quantity of oil in the deepwater port's pipeline system is less than the total amount that could be spilled from a single typical tank ship.

4. Liability for Oil Spill Pollution

Section 311 of the Federal Water Pollution Control Act, as amended by section 1002 of OPA 90, establishes that parties responsible for oil pollution are liable for all cleanup costs, third-party compensation claims, and natural resource damages as follows:

(a) A responsible party is totally liable (i.e., its liability is unlimited) for spills resulting from gross negligence, willful misconduct, or violation of certain Federal regulations;

(b) A responsible party's liability is limited if the spill is the result of negligence, other than gross negligence, willful misconduct, or violation of certain Federal regulations;

(c) A responsible party is totally absolved from liability for spills caused solely by acts of God, war, unforeseeable acts of third parties (except contractors and so long as the responsible party exercised due care and took precautions against foreseeable acts of third parties), or a combination of the three.

5. Limits of Liability

In general, section 1004 of OPA 90 (33 U.S.C. 2704) allows limited liabilities for parties responsible for oil spills under certain circumstances (essentially spills due to negligence other than gross negligence, willful misconduct, or violation of certain Federal regulations). Section 1004(a) sets specific limits for five categories of vessels and facilities: tank vessels, other vessels, onshore facilities, offshore facilities, and deepwater ports. For deepwater ports, the limit of liability was set at $350 million. However, section 1004(d) recognizes that $350 million might be an inappropriately high limit for deepwater ports and requires that, following a study of the relative risks, a rulemaking be initiated for establishing an appropriate liability limit for deepwater ports (but not less than $50 million).

It should be noted that other provisions in section 1004(d) of OPA 90 may also result in future adjustments of limits of liability for all facilities, including deepwater ports. These adjustments may be made from time to time to reflect significant increases in the Consumer Price Index (CPI) since 1990.

6. Oil Spill Liability Trust Fund

The Oil Spill Liability Trust Fund (hereafter the ''Pollution Fund'') is a Federally-managed trust fund for several oil pollution-related purposes. It is funded by a 5-cent-per-barrel levy on domestic crude oil and all imported oil (crude and product).

One of the Pollution Fund's more important purposes is to pay cleanup costs, claims, and damages after the responsible party has met its limit of liability for an accidental spill, or in the event that the responsible party is totally absolved from liability (for spills caused by acts of war, God, etc.). This ensures that innocent parties injured by a spill are compensated for their losses, regardless of the responsible party's liability. The Pollution Fund, in turn, is limited in its liability to $1 billion per incident.

7. Factors for Determining an Appropriate Limit of Lliability

The Department of Transportation has determined that it is appropriate national policy that the limit of liability for a deepwater port should be sufficiently high enough to cover all costs associated with the maximum credible negligent spill for which the port would be liable. A ''credible accident'' would be one that was the result of negligence other than gross negligence, willful misconduct, or violation of applicable Federal regulations. A facility experiencing a credible accident would have limited liability. Costs for a negligent spill would be borne by the Pollution Fund once the deepwater port has met its limit of liability.

Setting a limit of liability in accordance with this policy entails two studies: a risk analysis of the deepwater port to determine its maximum credible spill, and an economic analysis to determine the costs (cleanup, third party compensation, and natural resource damages) of such a spill.

The risk analysis should consider the following factors:

—Physical layout and condition of the deepwater port,
—On-site spill response capability,
—Spill history of the deepwater port,
—The pipeline leak detection system,
—Section-by-section pipeline analysis of credible spill scenarios, and
—Other spills for which the deepwater port might be solely or jointly liable (such as tanker spills).

The economic analysis should consider:

—Spill trajectories for the maximum credible spill,
—Potential response (cleanup) costs,
—Potential third party damage costs, and
—Potential natural resource damage costs.

8. Risk Analysis of LOOP

LOOP does not have any crude oil storage capacity within its legally-defined boundaries as a deepwater port. Therefore, the two largest sources of potential oil spillage for which LOOP might be solely or jointly responsible are its pipeline system, and a tanker calling at the port. Each of these were analyzed in a risk analysis.

Based upon engineering information provided by LOOP concerning the pipeline system and tanker operations at the port, the Coast Guard has prepared a risk analysis of the LOOP deepwater port in order to determine the credible spillages that could occur under accidental circumstances. This analysis, entitled ''Risk Analysis for the Louisiana Offshore Oil Port (LOOP),'' is available in the public docket for this rulemaking.

The risk analysis examined each oil transferring component of the LOOP deepwater port, from the floating hoses that connect the tanker at an SPM to the main oil pipeline connecting the marine terminal to the mainland. For each of these components, the analysis considered all credible accident scenarios that could violate its oiltight integrity. These scenarios included adverse weather, overruns by surface vessels, propeller and anchor damage, material defects or failures, maintenance mishaps, and corrosion leaks. For each scenario the leakage rate, detection time, and consequential oil spillage were determined.

The risk analysis also looked at tanker spill scenarios where LOOP might be solely or jointly responsible for accidental spills from a tanker.

Scenarios based upon damage caused by acts of war, God, or third parties were not evaluated because a deep-water port is not liable for such spills.

9. LOOP's Pipeline System

LOOP's pipeline system is designed to transfer crude oil at rates up to 100,000 bph (barrels per hour). However, the actual transfer rate at any given time is dependent upon the cargo pumping capacity of the discharging tanker. Most of the tankers calling at LOOP cannot discharge at the maximum rate; LOOP estimates that the maximum transfer rate actually occurs less than 10 percent of the time.

The pipeline system consists of two floating hoses that connect the tanker to a single-point mooring (SPM) buoy, and a buried 56-inch diameter seafloor pipeline that connects the SPM to the LOOP pumping platform. There are three SPMs at the LOOP marine terminal (but only one at a time actually transfers oil). A 21-mile, 48-inch diameter seafloor pipeline connects the pumping platform to the Fourchon booster station (located 3 miles inland from the beach) and then to the Clovelly Dome storage facility (another 23 miles away). The pipelines are constructed of ½-inch-thick steel. Offshore, the tops of the pipelines are buried at least 4 feet below the seafloor; as the pipeline approaches the beach it is buried even deeper.

The two floating hoses are approximately 1,100 feet long; their volumetric capacity is 570 barrels each. The SPM pipeline is 8,150 feet long; its volumetric capacity is approximately 25,400 barrels. The main oil pipeline is approximately 18 miles long from the marine terminal to the beach; its volumetric capacity is 213,000 barrels. During a transfer operation, the total pressurized pipeline fill from tanker to beach, including the SPM and pumping platform components, is approximately 240,000 barrels (the two other SPMs are not pressurized and are isolated by control valves). By way of comparison, the total cargo capacity of the EXXON VALDEX was 1.6 million barrels.

However, there is no credible accident that can split open any pipeline along its entire length and completely spill its contents. A more creditable scenario is a local rupture or fracture of the pipeline. High leakage rates can only occur while the pipeline is pressurized during transfer operations, when the internal oil pressure is considerably higher than the external mud and seawater pressure. The leakage rate will depend upon (1) The cross-sectional shape and area of the rupture, and (2) the internal or external pressure differential, which may be 200 to 450 psi (pounds per square inch) depending upon how far offshore the leak occurs. The total amount of spillage will depend upon how much time elapses before the leak is detected (or suspected) and the pipeline is shut down and depressurized.

10. LOOP's Leak Detection System

LOOP's main oil pipeline (from the offshore marine terminal to the Clovelly Dome storage facility 45 miles away) is computer-monitored by a Supervisory Control And Data Acquisition (SCADA) system which provides flow volume and leak detection service. LOOP's SCADA system consists of 140 temperature, pressure, density, and other sensors that provide oil flow data from three field sites along the pipeline: the marine terminal, the Fourchon booster station, and Clovelly Dome. Each field site has two redundant SCADA computers. Although one computer is designated as primary and the other as backup, both computers are on-line simultaneously and independently process all data. In addition to performing normal data processing, both computers also monitor system integrity to detect any component or system malfunctions (including cross-checking each other several times per minute). Electrical power to the computers and sensors is from uninterruptable power sources (UPSs). The field site computers communicate with the computers at the LOOP Operations Center via microwave transmissions. The SCADA system can immediately detect any pipeline malfunction or anomaly and trigger alarms at the Operations Control Center. The Operations console is manned around the clock with two persons (Oil Movement Controllers, OMCs) whenever oil transfer operations are occurring. From the Operations console, the OMCs can shut down the pipeline by remotely closing various control valves and tripping pumps off-line.

The pipeline sensors are scanned every 3 to 5 seconds by the SCADA computers, which immediately compare them to allowable high and low values. A major rupture of the pipeline system will cause out-of-bounds readings at several different sensors, and trigger alarms at the Operations Control Center.

To detect smaller leaks that do not cause out-of-bounds readings, the SCADA computer also continuously compares the actual metered inflow volume at the marine terminal with the estimated flow volume at various points in the pipeline (as calculated from the sensor data), looking for volumetric discrepancies. Short-term discrepancies of 50 cubic meters (314 barrels) in 13 minutes or 80 cubic meters (503 barrels) in one hour will trigger an alarm. Even smaller leaks will be detected on the basis of long-term discrepancies of 200 cubic meters (1,257 barrels) in 48 hours, based upon the metered inflow at the offshore terminal and the metered outflow at Clovelly Dome. This threshold is the limit of the line surveillance sensitivity.

LOOP investigates a discrepancy by performing calibration checks of the sensors and meters. If these do not reveal any malfunctions or resolve the imbalance, then a special pipeline overflight will be initiated to visually search for any leakage. If necessary, the pipeline can also be pressure-tested in conjunction with the overflight. A pressure test would consist of stopping the oil flow, statically pressurizing the pipeline to 200 psi, and monitoring the pressure for a minimum of 1 hour. Any loss in pressure would indicate a leakage. In its 12-year operating history, LOOP has never had to pressure test the main pipeline due to a volumetric flow discrepancy. (The pipeline has been pressure-tested twice for other reasons not related to volumetric discrepancies, and the floating hose and SPM sections of the pipeline are routinely pressure-tested as part of post-maintenance integrity verification before being put back into service).

In addition to the SCADA system, LOOP also conducts weekly overflights of the entire 45-mile pipeline right-of-way for visual detection of any leaks and to ensure that no unauthorized third-party activity (ashore or afloat) is occurring which may damage the pipeline. Such activity might be a dredging operation in the marshes or an oil drilling rig being positioned in the vicinity of the LOOP pipeline.

The floating hose and SPM seafloor pipeline section between tanker and pumping platform (approximately one and a half miles) is not directly computer-monitored. A major pipeline rupture along this section will create an abnormal pressure drop at the suction side of the booster pumps on the pumping platform, detectable by the SCADA sensors. Such a pressure drop would also be apparent to personnel on watch in the tanker's cargo control room, who would initiate a shutdown of the tanker's cargo pumps. A minor leak will create a surface slick, visually detectable from the tanker, pumping platform, or service vessels always operating around the Marine terminal. Whenever a tanker is discharging at an SPM, a LOOP service vessel also conducts sunrise and sunset inspections each day along the SPM pipeline and around the tanker.

11. Major Pipeline Spill Scenarios

Major pipeline spill scenarios are based upon total severance of the pipeline during a full-capacity transfer operation at 100,000 bph flow rate. There are two points in the pipeline system where maximum spills could occur: Severance of the main oil pipeline (which connects the terminal to shore), and severance of a floating hose (that connects the tanker to the SPM).

(a) Severance of main oil pipeline: The scenario assumed complete severance and offset of the pipeline by 48 inches, allowing full, unimpeded discharge from the severed end. This severance was assumed to occur at the midway point (56,000 feet) between the marine terminal and the Fourchon booster station, which is the furthest distance (10.6 miles) from any of the SCADA sensors. This represents the longest time delay (16 seconds) before the transient pressure wave would reach a sensor. The water depth at that point is 50 to 60 feet, well within the working range of divers to effect repairs.

The failure analysis determined that, within 24 seconds of the rupture, the SCADA computer would identify abnormal pressure data at both the marine terminal and Fourchon booster station sensors and trigger alarms at the LOOP Operation Control Center. Full system shutdown (tripping booster pumps off-line, hydraulically closing control valves, and depressurization of the pipeline) would be accomplished in 3 minutes from rupture. The estimated spillage during this shutdown period would be 2,785 barrels.

After shutdown, and because its density is heavier than crude oil, seawater will begin to flow into the ''offshore'' ruptured pipemouth, displacing an equal volume of crude oil out of the pipe. Because the seafloor gradient is nearly flat (110 feet of water depth over 18 miles of pipeline length), this will be a low-energy displacement process. For the first few minutes after rupture the displacement rate will be approximately 1,366 bph, but will slow down rapidly as the seawater intrudes deeper into the pipeline and must overcome the increasing resistance (viscosity and other frictional losses) of displacing oil back out of the pipe. After 14 minutes the displacement rate would be approximately 877 bph, and after 5 hours it would be approximately 367 bph. Over a 5-hour period it is estimated that the seawater will intrude approximately 2,150 feet into the pipeline, displacing 2,409 barrels of crude oil.

Depressurization of the ''onshore'' pipeline (from rupture to Clovelly Dome 33 miles away) would take 51 seconds, during which time approximately 500 barrels of seawater will be sucked into the ruptured pipemouth. LOOP would keep the shoreside pumps on line in order to maintain suction on the pipeline and continue drawing in seawater; 30 minutes of this suction would assure a full water plug in the pipeline, precluding any oil backflow out of that ruptured pipemouth (a full water plug would be approximately 3,868 barrels).

In the meantime, LOOP will also activate its response plan for locating and plugging a pipeline rupture. LOOP maintains a service vessel and a team of divers continuously on-duty at the marine terminal. The service vessel can transit the 18-mile offshore distance in less than 2 hours, following the pipeline and searching for the surface slick. Once located, divers would be able to temporarily seal off the open pipemouth within 3 hours. Complete repairs to the pipeline would be accomplished without further spillage, using pipe stoppling and repair techniques already developed by industry.

Therefore, the maximum spillage expected from severance of the main oil pipeline is not more than 5,194 barrels.

(b) Severance of a floating hose: Two 24-inch ID floating hoses connect the tanker to the pipeline manifold located on the seafloor at the base of the SPM. Each hose string is designed for a flow rate of 50,000 bph, and is approximately 1,100 feet long, made up of 24 to 26 hoses bolted together. The wall construction of a hose is an inner liner of ¼-inch-thick rubber, surrounded by ¾ inches of multi-ply cord reinforcement (either steel wire or poly cord), two helix windings of ½-inch steel wire, a ¼-inch outer liner, and a ¼-inch reinforced rubber covering.

Total severance of a floating hose would cause a substantial pressure drop in the pipeline. This pressure drop would be detected by the SCADA sensors at the suction side of the booster pumps on the pumping platform, triggering alarms at the LOOP operations center. Simultaneously, the pressure drop would also be apparent to the cargo officer in the pump room aboard the tanker. The risk analysis determined that emergency shutdown and depressurization would take 3 minutes (1 minute for failure recognition, 2 minutes to trip pumps offline and close control valves on the tanker and SPM manifolds). Pressurized outflow during that period is estimated to be 1,667 barrels. Assuming complete volumetric loss of the hose contents itself (570 barrels) and the SPM manifold (96 barrels), the total spillage would be 2,333 barrels.

12. Other Pipeline Spills

The leak detection thresholds of the SCADA system are 314 barrels within 13 minutes, 503 barrels within 1 hour, and 1,257 barrels within 48 hours. Thus, the SCADA system is expected to detect any leak of 26 bph or more, for a maximum spillage of 1,257 barrels before discovery.

Leaks of a lesser rate would be below the detection level of the SCADA system and would therefore have to be detected visually as surface slicks, discovered from service vessels or overhead flights. Because of the high level of service vessel activity around the port, the risk analysis assumes that surface slicks within the LOOP safety zone will be discovered within 24 hours. Because of the high level of aviation (helicopter) activity around the waters of the Gulf, the risk analysis assumes that slicks in open water will be discovered within 72 hours. These discovery time delays are conservatively long, allowing for periods of night (when visual detection is unlikely) and also recognizing that small leaks from a seafloor pipeline (in 100 feet of water) may be thinly dispersed, and therefore more difficult to notice, by the time the oil reaches the surface. However, once discovered, leakages would be reduced to trickle amounts by shutting down and depressurizing the pipeline.

The LOOP risk analysis determined that small pipeline spills could result from corrosion pits, failure of bolted connections (gasket or flange leaks), lesser pipeline ruptures, or maintenance mishaps.

Leakage from corrosion pits in the pipeline would depend upon the size of the corrosion hole and the oil pressure within the pipeline. Initially, the hole would be no more than a pinhole in size, but would enlarge over time. The leakage rate from a ⅛-inch diameter hole at a pressure of 172 psi would be 6 bph. If the leak occurred within the safety zone (i.e., discovered within 24 hours), spillage would be no more than 144 barrels. If the leak occurred in open water somewhere between terminal and shore (i.e., discovered within 72 hours), spillage would be no more than 432 barrels.

Total failure of a bolted connection (i.e., complete separation) is considered unlikely because of the number of bolts involved. More-likely are partial failures resulting in gasket or flange leaks; at normal working pressures, leakage rates are estimated to be 8 bph. All bolted pipeline connections are within the safety zone; therefore, leaks would be discovered within 24 hours. A leaking connection from a floating hose might spill 204 barrels before discovery. However, many of the bolted connections are on the tanker or pumping platform where leaked oil would be contained by spill coamings or troughs and discovered during normal watchkeeping rounds.

Another possible spill source would be from a floating hose if run over by a service craft or fishing vessel that slashes the hose with its propellers. The risk analysis determined that the steel-reinforced wall construction of the hoses makes it unlikely that they could be fully severed by the propellers of service vessels. Rather, a slash might penetrate through the inner wall of the hose. Such a slash would leak only when the pipeline was pressurized; total leakage is estimated to be not more than 165 barrels.

The largest maintenance accident would be spillage of the entire contents of a floating hose and the SPM base (approximately 667 barrels).

13. Tanker Spill Analysis

OPA 90 relieves a deepwater port of any liability for tanker spills caused solely by the tanker. Thus, LOOP is not responsible for spills solely caused by malfunctioning tanker equipment (such as valves or seachests), or human error by tanker personnel (such as discharge of oily bilgewater), or from other accidents aboard the tanker (such as fire or explosion) which are not caused by LOOP.

For most of the time during its call at LOOP, a tanker is under sole command and control of its master and officers, who are responsible for safe operation and maintenance of their vessel and its equipment, and for compliance with all applicable Federal regulations. However, there are certain tanker spill scenarios for which LOOP might be liable (solely, or jointly with the tanker). These scenarios arise during those periods when the tanker is under joint navigational responsibility of LOOP and its own master, or joint transfer responsibility during discharge of the tanker's cargo oil. Because of these joint responsibility situations, LOOP's potential liability for a tanker spill must be reviewed as part of this rulemaking.

14. Navigation-Related Tanker Spill

Joint navigational responsibility exists when the tanker is maneuvering within the port's safety zone under direction of LOOP's Vessel Traffic Controller, or is maneuvering to or from the SPMs with the LOOP mooring master on board. (Although LOOP reports that the mooring masters are independent contractors to LOOP, OPA 90 does not limit or relieve the liability of a responsible party for acts or omissions by its agents or contractors.)

The most serious navigation-related accident that could occur at a deepwater port would be a collision between a tanker and another tanker or platform. A possible cause for such a collision could be mechanical failure of the tanker's steering system. In 1990, LOOP conducted a risk analysis that examined steering and propulsion failure scenarios of tankers maneuvering around the safety zone. As a result of this study, LOOP contracted a purpose-built tractor tug that is specifically designed for controlling disabled tankers. This tractor tug, the LOOP RESPONDER, has been in service at LOOP since 1992.

Lesser navigation-related tanker spills, resulting from bona fide accidents where LOOP might be found solely or jointly liable, are more possible. One of these is a mooring overrun where the tanker runs over the SPM while maneuvering to or from the buoy. The risk analysis determined that the worst-case outcome for a mooring overrun would be severance of the two floating hoses, spilling a maximum of 209 barrels. Because of the slow tanker speeds during mooring and unmooring operations (less than 5 knots), and the heavy fendering arrangements on the SPM buoy, rupture of the tanker's hull (by impact with the SPM buoy) is not expected.

Another possible accident is a collision between a service vessel and a tanker. Once again, however, the tanker hull is not expected to be ruptured because of the slow relative speeds and fendering arrangements on the service vessels.

The risk analysis concluded that it was not possible to predict a maximum spill size from an accident involving a tanker. This is because there are too many circumstances and variables that influence the outflow. However, it is unlikely that such accidents could occur without being in violation of Federal regulations, particularly those governing tanker movements within the safety zone. In such a case, the responsible party (LOOP or the tanker) would not be allowed to limit its liability, regardless of the limits established by this rulemaking.

15. Transfer-Related Tanker Spill

Joint transfer responsibility occurs when the tanker operates its cargo pumping system in response to directions from LOOP's Oil Movement Controller. A tanker spill during transfer operations is expected to be associated with the bolted connections where LOOP's floating hoses connect to the tanker's cargo manifold. Because LOOP furnishes the gaskets and bolts used in making the connection, and oversees the bolting and unbolting of the hoses, LOOP is potentially liable for any spillage from the connection.

The risk analysis determined that complete failure (separation) of the bolted connection was improbable because of the size and number of bolts used. It is more likely that spills would be caused by leaks resulting from a poorly-sealed connection. The risk analysis determined that such spills would be less than 10 barrels (the most serious being the result of a gasket failure).

16. Historical Spill Costs

At this time there is no economic model for projecting costs of an oil spill along the Louisiana Gulf coast. There have been some recent crude oil spills in those waters, but the final costs are not yet known. Accordingly, estimating the cost of a maximum credible spill must be done from broader historical data on U.S. spills.

The Coast Guard and Volpe National Transportation Systems Center (TSC) commissioned the Unisys Corporation and Mercer Management, Inc. to study and develop oil spill cleanup costs, third-party compensation, and natural resource damage data.

The results are presented in the draft Interim Report ''OPA 90: Regulatory Impact Analysis Review—Spill Unit Values,'' dated September 15, 1992. The study researched all tank vessel oil spills of over 100,000 gallons (2,381 barrels) that occurred in U.S. waters between 1980 and 1990. The study's oil spill database contains cost information for some 59 incidents, representing 76 percent of the total volume spilled from

1980 to 1990, and 89 percent of all oil spilled in incidents of at least 100,000 gallons. Although cleanup costs and third-party damages are well documented, natural resource damage settlements are relatively few.

The study determined that location of a spill was a significant factor in cleanup and third party costs. For example, the weighted average cost for a dirty product spill in internal or headland waters was $41,652 per metric ton but only $8,364 per metric ton for spills 12 to 200 miles offshore (costs in 1992 dollars for U.S. spills 1980–1990, weighted by spill size). The study developed a range of unit cost values for ''clean'' and ''dirty'' product spills. For dirty product spills, which would include crude oil, the range of unit values was from $121 to $264 per gallon ($5,082 to $11,088 per barrel).

It is noted that several recent spills are in the process of litigation or settlement, and may therefore provide more-current cost data by the time of the final rule for this rulemaking. Accordingly, the Department may find it appropriate to use the more current cost data for its limit of liability determination.

17. LOOP's certification of financial responsibility

Under the original Deepwater Port Act of 1974 (DPA), the deepwater port had a liability limit of $50 million except for spills caused by gross negligence or willful misconduct, whereupon liability was unlimited. Section 18 of the DPA required the deepwater port to ''carry insurance or give evidence of other financial responsibility in an amount sufficient to meet the liabilities imposed by [the DPA].'' In 1980, LOOP and the Department of Transportation signed a memorandum of understanding (MOU) which established that LOOP must provide annually evidence of financial responsibility in the amount of $150 million. The MOU outlines a two-part requirement: that LOOP must maintain 1) a net worth, including fixed assets, of $50 million, and 2) a combination of working capital and insurance totalling $100 million (after deducting any claims and insurance deductibles). Shortfalls in these minimum levels must be made up with insurance. Thus, the MOU established a minimum financial worth of LOOP of $150 million. LOOP submits quarterly reports to the Department demonstrating that it is meeting the minimum requirements as set forth in the MOU. Although OPA 90 revised the DPA (specifically deleting section 18) and established a new liability limit at $350 million, the terms of the MOU are still being observed, pending the outcome of this rulemaking.

Adoption of a $150 million liability limit would confirm DOT's past requirement for LOOP's financial responsibility. DOT's assessment was that $150 million would suffice for most oil spills. A liability limit in the $150 million range would not cause additional expense for LOOP.

18. Background on the $350 million statutory limit on liability for negligence

OPA 90, Section 1004, establishes a liability limit of $350 million ''for any onshore facility and a deepwater port.'' In the context of the Exxon Valdez oil spill which significantly influenced the shaping of OPA 90, Congress decided that the $350 million level of liability fitted into the other liability provisions of OPA 90, in particular the liability for tank vessels. The Congress believed that the risk of oil spills of deepwater ports warranted a $350 million limit and it believed that insurance would be available to support liability up to this level. For damages above the $350 million limit OPA granted the deepwater ports the benefit of payment of the damage claims out of the Oil Spill Liability Trust Fund. Deepwater ports have been subject to this level of liability for their negligence since 1990.

In OPA 90, Section 1004(d), Congress gave the Executive Branch authority to adjust the liability limit for onshore and deepwater port facilities downwards if such an adjustment could be justified. The assumption of OPA 90 is that the liability limit set by the law remains as provided by the statute, unless good reason can be established for a lower limitation. At this time, the limit of liability for onshore facilities remains at $350 million.

Congress did not require the Executive Branch to study adjustment of the limit for onshore facilities within any specific time limit. The authority to study may be used at any time. However, in regard to deepwater ports, OPA 90 requires a study of oil spill risks in one year after enactment of OPA 90. The results of that study are described elsewhere in this NPRM. Thus the question becomes whether the DOT study has uncovered new information which would cause the Secretary to establish liability limits lower than those established by Congress. If new information of sufficient weight and magnitude showing that the risk of ''transportation of oil by vessel results in a lower operational or environmental risk than the use of other ports,'' then the Secretary may initiate rulemaking to find the level of liability which is more appropriate than the level established by the statute.

19. Proposed § 137.603 Limit of Lability

The Department has determined that it is not appropriate to assign a single, universal limit of liability for all deepwater ports. Rather, a limit should be set individually for each deepwater port, on the basis of its design, location, spillage risk, and estimated costs (clean up costs, third party compensation, and natural resource damages). Therefore, through this proposed rule, the Secretary of Transportation would establish an appropriate limit of liability for negligence, between the statutory limits of $350 million and $50 million, for individual deepwater ports.

Although the regulatory text section of this NPRM proposes a range of possible limits of liability for LOOP ($50–$350 million), the Department is particularly focusing on three possible limits, as follows:

(1) Maintain the present limit of liability for negligence at $350 million, as established by OPA 90; or

(2) Establish a limit of liability for negligence at $58 million, based on LOOP's maximum pipeline spill of 5,194 barrels and the TSC recommended worst-case cost of $11,088 per barrel for dirty product spills; or

(3) Establish a limit of liability for negligence at $150 million, reflective of the 1980 memorandum of understanding between the Department and LOOP. It reflects DOT's risk assessment in 1980, based upon the TSC range of spill unit costs for dirty products ($5,082 to $11,088 per barrel), this limit of liability would provide for a spill of 13,500 barrels to 29,500 barrels.

The Department presents these three limits, but may select a limit within the $50–$350 million range in the final rule after reviewing specific public comments on these limits. Additionally, the Department seeks comments on whether it should reassess and possibly readjust the liability limit at fixed time intervals.

It is reiterated here that the unlimited liability provisions of the law are not affected by this rulemaking. LOOP would not be allowed to limit its liability for spills caused by gross negligence, willful misconduct, or violation of certain Federal regulations in accordance with section 1004 of OPA 90 (33 U.S.C. 2704).

Regulatory Analysis and Notice

DOT Regulatory Policies and Procedures

This NPRM is considered to be a significant rulemaking under DOT Regulatory Policies and Procedures, 44 FR 11040, because of substantial industry interest.

Executive Order 12866

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 12866, and it has been determined that it is not an economically significant rulemaking.

Executive Order 12612

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that it does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Regulatory Flexibility Act

The Department must consider whether this proposal will have a significant impact on a substantial number of small entities.

This proposal only affects a single company, Louisiana Offshore Oil Port (LOOP), Inc., which owns and operates the only deepwater port in the United States at present. Neither LOOP specifically, nor deepwater ports in general, qualify as small business concerns. Accordingly, the Department has determined that this proposal does not affect any small business entities.

If a company affected by the proposed regulations thinks it qualifies as a small entity, and that the proposed regulations will have an adverse economic impact, then it should submit a comment (see **ADDRESSES**) explaining why it qualifies as a small entity, and in what way and to what degree the proposed regulations will affect it.

Paperwork Reduction Act

This NPRM contains no collection of information requirements under the Paperwork Reduction Act.

Assessment

The original Deepwater Port Act of 1974 (DPA) (33 U.S.C. 1501, *et seq.* and 43 U.S.C. 1333) set the limit of liability for a deepwater port at $50 million, except for unlimited liability for spills caused by gross negligence or willful misconduct. Under a 1980 Memorandum of Understanding (MOU) between LOOP and the Department of Transportation, LOOP has been periodically certifying to the Department that it is maintaining a combined total of $150 million of insurance, working capital and net worth. This is the amount that the Department determined to be necessary to ensure that LOOP could meet all of its liabilities (limited and unlimited) in accordance with the DPA.

OPA 90 established a new, $350 million limit of liability for the negligence of deepwater ports, but allows for the Secretary to set lower limits as appropriate (but not less than $50 million). This NPRM presents three proposed limits of liability under consideration for the LOOP deepwater port within the range $50–$350 million: (1) $350 million (the status quo limit set by OPA 90), (2) $58 million (based upon the worst-case cost of maximum pipeline spill), and (3) $150 million (reflective of the total financial worth requirement per the MOU).

Selecting either the $58 million or $150 million options would have minimal economic effect because LOOP is already required to maintain a minimum worth of $150 million. Selecting the $350 million may or may not have an impact on LOOP, depending upon its present net worth, working capital, and insurance coverage. None of the options, regardless of which one is selected, is likely to affect the general private sector, consumers, or Federal, state or local governments. Accordingly, the anticipated impact of this proposal is considered so minimal that it does not warrant a full regulatory assessment or evaluation.

National Environmental Policy Act

The Department has determined that this rulemaking is administrative in nature and therefore is categorically excludable from further environmental assessment.

List of Subjects in 33 CFR Part 137

Claims, Harbors, Insurance, Oil pollution.

For the reasons set out in the preamble, the Department proposes to amend 33 CFR part 137 as follows:

SUBCHAPTER M—MARINE POLLUTION FINANCIAL RESPONSIBILITY AND COMPENSATION

PART 137—DEEPWATER PORT LIABILITY FUND

1. The authority citation for 33 CFR part 137 is revised to read as follows:

Authority: 33 U.S.C. 1509(a), 1512(a), 1517(j)(1)), 2704; 49 CFR 1.46.

2. Subpart G is added as follows:

Subpart G—Limits of Liability

Subpart G—Limits of Liability

§ 137.601 Purpose.

(a) This subpart sets forth the limits of liability for U.S. deepwater ports in accordance with section 1004 of the Oil Pollution Act of 1990 (33 U.S.C. 2704).

(b) In general, the limits of liability for U.S. deepwater ports will be established by the Secretary of Transportation on a port-by-port basis, after reviewing a spill risk analysis and associated costs for which the port could be liable. The limit for negligence of the deepwater port will not be less than $50 million or more than $350 million.

§ 137.603 Limits of Liability.

(a) The limit of liability for negligence of the deepwater port licensed and operated by Louisiana Offshore Oil Port (LOOP), Inc., is (range $50,000 to $350,000).

(b) [Reserved]

Dated: February 2, 1995.

Federico Peña,

Secretary of Transportation.

[FR Doc. 95–3039 Filed 2–3–95; 8:45 am]

BILLING CODE 4910–62–M