

stevedoring supervisor along with information from the port authority (the owner of the land) prior to the ship's arrival in port. OSHA estimates that it will take four hours of supervisory time to develop this plan. The cost of this task is estimated by multiplying the supervisor's average wage rate of \$60.92 per hour (PMA, 2003) by the four hours to complete this task. This totals \$244 per establishment. In addition to the time to develop the plan, the Agency estimates that it will take employers one hour each to maintain and update the plan as necessary. The second and recurring cost year for this requirement is \$61 annually per plan.

The employer would also need to ensure that the liftlocks used to make up

VTLs at a terminal are the same type of certified liftlocks that are on the vessel. The ship owner and stevedore must ensure that the liftlocks are certified. The ship owner owns the liftlocks. The Agency estimates that the 4,000 SATLs needing to be certified on the model container ship will cost about \$1 per lock for testing, certification, and annual examination. Thus, the cost to comply with this requirement for the model container ship is \$4,000. The Agency assumes that each affected shipper will have at least one ship that will do VTLs and need to have all of its SATLs certified. The Agency seeks comment on this assumption.

Table 5 presents the estimates for the total cost of performing VTLs using the

model container ship operation. Performing VTLs actually results in a net cost saving; the savings are calculated in the Benefits section of this Preliminary Economic Analysis.

OSHA does not believe that the entire industry will use VTLs. At most ports, unions and stevedores must negotiate work practices, which may include the decision to perform VTLs. The potential for VTLs is also highly dependent on the pattern of trade in each port or the cargo of each ship. The majority of the costs would not be imposed directly on the stevedore (employer), because the ship owners would need to ensure that SATLs are certified before being used as liftlocks.

TABLE 5.—MODEL CONTAINER SHIP OPERATION COST AND TOTAL INDUSTRY COMPLIANCE COSTS

	Model container- ship operation cost	Estimate industry compliance cost ¹
\$ 1917.46(a)(1)(viii)(A)—Load Indicating Devices	0	0
\$ 1917.71(b)(9) Notifying the crane operator of the VTLs	10	1,584
\$ 1917.71(j) Plan for transporting VTLs in the terminal	244	1,949
\$ 1917.71(k) Means of Separating Damaged and Working Liftlocks ²	0	0
\$ 1918.85(f)(3)(i)&(ii) Testing and Examining Liftlocks	4,000	232,000
Total Costs	4,254	235,533

Source: Office of Regulatory Analysis.

¹ These estimates were calculated mostly by multiplying the model container ship operation cost by 156 (estimate of the number of VTL jobs).

² This practice is already being done whether VTLs are being done or not, as discussed in the text.

The costs of compliance in Table 6 illustrate total annualized compliance costs, estimated on a per establishment basis for each affected NAICS code. Table 6 assumes that each establishment

would have at least one ship that would need to replace all of its SATLs to have them certified for the purposes of VTLs. OSHA recognizes that this assumption may overstate the costs. Based on this

data and the discussion above in the Industry Profile section, the Agency is estimating that 58 vessels would have their ship's SATLs certified for VTLs.

TABLE 6.—ESTIMATED ANNUALIZED COMPLIANCE COST PER ESTABLISHMENT

	NAICS 488310 Port and harbor oper- ations	NAICS 483111 Deep sea freight transpor- tation	NAICS 483113 Coastal and Great Lakes freight trans- portation
Affected Establishments Engaging in VTLs	8	41	17
Load Indicating Devices	\$0	\$0	\$0
Notifying the crane operator	\$1,584	\$0	\$0
Plan for Transporting VTLs	\$278 ¹	\$0	\$0
Means of Separating Damaged and Working Liftlocks	\$0	\$0	\$0
Testing and Examining Liftlocks	\$0	\$164,000	\$68,000
Total Annualized Compliance Cost	\$1,862	\$164,000	\$68,000
Annual Compliance Cost Per Affected Establishment	\$233	\$4,000	\$4,000

Source: Office of Regulatory Analysis.

¹ This total represents the cost for developing the plans for transporting VTLs in the marine terminal (\$1,949) discounted by a 7 percent rate over 10 years, which totals \$278.

OSHA estimates that for every dollar spent in NAICS 488310 to comply with the proposal, the employer would save approximately ten dollars by using VTLs. For the shippers, the cost invested in initially inspecting SATLs and annually examining liftlocks is estimated to reduce their shipping time

by about 4 hours each for 156 cargoes in NAICS 483111 and NAICS 483113 (Table 6).

Economic Impact Analysis

This proposed rule presents no issues of economic infeasibility. The use of VTLs is an option available to the

employers. Any employer that finds that using VTLs would result in an increase in its costs need not adopt this option, and thus need not incur any costs. OSHA has examined the economic impacts for those who incur the costs of using VTLs.