are small entities (i.e., they employ fewer than 500 employees), however, nearly all the firms operating in the Coastal region are small (approximately 372 out of an estimated 435 firms, or 86 percent are small firms). Thus 0 percent to 3 percent of small firms could potentially fail as a result of this rule. The high end of this estimate is very conservative because these firms might not fail; however, but data were unavailable to rule out the possibility. Thus these firms were considered to have the potential to fail as a result of the proposed rule. Due to data constraints, a cash flow analysis was not undertaken, but potential effects on working capital and equity were analyzed. In general, the average small firm that is currently discharging produced water or other wastes will experience a somewhat greater decline in working capital or equity than that for large firms. Among small dischargers, the median change in equity is 1.26 percent as compared with 0.02 percent for large firms, and the change in working capital is 4.54 percent, versus 0.05 percent for large firms. However, the typical small discharging firm will not experience a change in equity or working capital of more than 5 percent. Additionally most small firms are currently not discharging any wastes, thus will experience no change in equity or working capital. When these nondischarging firms are also considered, the median small firm operating in the coastal region will experience no change in equity or working capital. Thus EPA does not find that impacts on small firms will be disproportionately greater than those on large firms.

VIII. Non Water Quality Environmental Impacts

The elimination or reduction of one form of pollution has the potential to aggravate other environmental problems. Under sections 304(b) and 306 of the CWA, EPA is required to consider these non-water quality environmental impacts (including energy requirements) in developing effluent limitations guidelines and NSPS. In compliance with these provisions, EPA has evaluated the effect of these regulations on air pollution, solid waste generation and management, consumptive water use, and energy consumption. Because the technology basis for the limitation on drilling fluids and drill cuttings may require transporting the wastes to shore for treatment and/or disposal, adequate onshore disposal capacity for this waste is critical in assessing the options. Safety, and impacts of marine traffic on coastal waterways, were other factors also considered. EPA evaluated the non-water quality environmental impacts on a regional basis because the different regions each have their own unique considerations.

A. Drilling Fluids and Cuttings

The control technology basis for compliance with the options considered for the drilling fluids and drill cuttings wastestreams is a combination of product substitution, grinding followed by injection, and/or transportation of drilling wastes to shore for treatment and/or disposal. The non-water quality environmental impacts associated with the treatment and control of these wastes are summarized in Table 10. These non-water quality environmental impacts are those associated with drilling fluids and cuttings disposal and treatment alternatives only in Cook Inlet. All other coastal areas are currently achieving zero discharge of these wastes and, thus the control options cause no additional impacts. Non-water quality environmental impacts estimates are presented in more detail in the Coastal Technical Development Document.

TABLE 10.—NON-WATER QUALITY IMPACTS FOR DRILLING WASTE CONTROL OPTIONS

Options	Volume of waste transported to onshore disposal [3]	Volume of ground and injected waste (bbls)	Air emissions (tons/yr)	Fuel requirements (BOE) [2]/year
Option 1: Zero for all except BPT for Cook Inlet [1]	0	0	0	0
Option 2: Zero for all except for Cook Inlet with more stringent toxicity limit	93,984	0	9	1,700
Option 3: Zero for all	422,780	130,066	12.5	2,300

[1] Option one represents current standards such that no additional barrels of wastes or resulting air emissions or fuel requirements are required.
[2] BOE (barrels of oil equivalents).
[3] The volume of barged waste does not include wastes that would be ground and injected. The air emissions and fuel requirements presented in this table are a result of transporting these barged wastes and for grinding and injecting the rest.

1. Energy Requirements

Energy requirements for Options 2 and 3 were calculated by identifying those activities necessary to support onshore disposal of drilling wastes and injection at the platform. The only landfill available for disposal of drilling wastes in Cook Inlet is privately owned and operated. Access to this landfill is limited to only the two operators that own and operate it. The landfill, which is located on the west side of Cook Inlet, is only operated for four months in the summer because of climate conditions that are specific to Cook Inlet. Drilling wastes are first transported by supply boats from the platform to a temporary storage facility on the east side of Cook Inlet to be unloaded and temporarily stored. Barges are used to transport drilling wastes from the east to the west side of Cook Inlet. Trucks are then used to transport the muds and cuttings to the landfill. For the other operators in Cook Inlet, the technology basis for Option 3 (zero discharge) is grinding followed by injection at the platform. For Option 2 (which includes a 100,000 ppm (SPP) to 1,000,000 ppm (SPP) toxicity limitation that all operators would not be able to meet), the technology basis would be transportation and disposal to the lower contiguous United States for those operators not having access to Alaska landfills Option 2.

EPA used the volumes of drilling waste requiring onshore disposal to estimate the number of supply boat trips necessary to haul the waste to shore. Projections made regarding boat use included types of boats used for waste transport, the distance travelled by the boats, allowances for maneuvering, idling and loading operations at the drill site, and import activities at the marine transfer station. EPA estimated fuel required to operate the cranes at the drill site and import based on projections of crane usage. EPA determined crane usage by considering the drilling waste volumes to be handled and estimates of crane handling capacity. EPA also used drilling waste