

the BPT requirement of "no free oil" on land-based disposal of oil-based drilling fluids and oil laden cuttings and substitution of mineral oil for diesel oil in pills. As was done in the Offshore Guidelines BCT determinations, oil content, which is normally measured in drilling wastes, was used as surrogate for the oil and grease conventional pollutant in the calculation of pollutant removals. The following are annual BPT costs and conventional pollutant removals per well for drilling fluids and cuttings:

Annual Cost (1992 Dollars):

Drilling Fluids—\$40,275

Drill Cuttings—\$22,355

TSS Removals (Annual):

Drilling Fluids—267,911 pounds

Drill Cuttings—297,880 pounds

Oil and Grease Removals (Annual):

Drilling Fluids—207,584 pounds

Drill Cuttings—92,895 pounds

The three options for Cook Inlet were evaluated according to the BCT cost reasonableness tests. The pollutant parameters used in this analysis were total suspended solids and oil and grease. All options, except the "BPT"

option, no discharge of free oil, fail the BCT cost reasonableness test. Costs for the "BPT" option are equal to zero because it reflects current practice. The results of the POTW test (first part of the BCT cost test) for the zero discharge option (Option 3) is \$0.151 per pound of conventional pollutant removed. A value of less than \$0.534 per pound (1992\$) is required to pass the POTW test. Thus, this option passes the POTW test. The results of the Industry Cost Ratio Test (ICR) is 2.097. As this value of 2.097 is greater than 1.29, zero discharge for drilling fluids and drill cuttings in Cook Inlet fails the second test. Thus, EPA proposes that BCT be equal to BPT for drilling fluids and drill cuttings discharges in Cook Inlet.

EPA conducted the same set of tests for Option 3 for the separate wastestreams of drilling fluids and cuttings. The results of the BCT cost tests for Option 2 and 3 are contained in Table 3 of the preamble, show that drilling fluids fail the second test, and cuttings pass. (Results for Option 1 are equal to zero and are not shown on Table 3).

The same set of tests are conducted for the Option 2, prohibitions on the discharge of free oil and diesel oil, limitations on cadmium and mercury in stock barite and toxicity limitation of between 100,000 and 1 million ppm (SPP) or greater. For the purpose of conducting these calculations, a volume fraction of 0.83 (83 percent) of the drilling fluids and cuttings was anticipated to comply with a toxicity limitation of between 100,000 ppm (SPP) and 1 million ppm (SPP). A summary of the results of these tests, also presented in Table 4, demonstrate drilling fluids and cuttings both fail the cost test. Thus, both candidate BCT options fail the ICR test, and BCT is set equal to Option 1 for this proposal which is equal to zero discharge everywhere except for Cook Inlet where BPT would apply.

The specific calculation of these BCT cost reasonableness tests for the drilling fluids and drill cutting options for Cook Inlet are discussed further in the Coastal Technical Development Document.

TABLE 4.—BCT Cost Test Results for Drilling Fluids and Drill Cuttings for Cook Inlet¹

Regulatory option	Pollutant removal (lb/well)	Compliance cost ¹ (\$/well)	BCT cost (\$/lb)	Pass POTW (<0.534) ²	BPT cost (\$/lb)	ICR ratio	Pass ICR (<1.29)
Drilling Fluids							
Option 2	191,693	129,026	0.673	No	0.085	
Option 3	1,127,603	418,888	0.371	Yes	0.085	4.365	No.
Drill Cuttings							
Option 2	389,756	30,226	0.078	Yes	0.057	1.368	No.
Option 3	2,292,681	98,258	0.043	Yes	0.057	0.754	Yes.
Drilling Fluids and Cuttings							
Option 2	581,449	159,252	0.274	Yes	0.072	3.806	No.
Option 3	3,420,284	517,146	0.151	Yes	0.072	2.097	No.

¹ Results of Option are equal to zero and are not shown in this table.

² Compliance Cost and Conventional Pollutants Removal are incremental to BPT.

³ 1986 benchmark (0.46) adjusted to 1992 dollars \$0.534.

6. BAT and NSPS Options

EPA is co-proposing all three options considered for the BAT and NSPS level of control for drilling fluids and drill cuttings. A discussion of the costs and impacts and description of the selection rationale is contained below.

a. Costs.

No costs would be incurred by the industry to comply with Option 1 because the requirements are reflective of current practice. Costs incurred by the coastal industry to comply with Option 2 would amount to approximately \$1.4 million annually.

These costs are attributed only to the Cook Inlet operators who would be required to meet the Offshore limitations and a more stringent toxicity limitation based on an estimate that 83 percent of the drilling fluids and drill cuttings would pass a toxicity limitation of between 100,000 ppm (SPP) and 1,000,000 ppm (SPP). Thus, 17 percent of the drilling wastes would need to be disposed of either onshore or by grinding and injection.

Costs to comply with Option 3 (zero discharge all) are attributed only to Cook Inlet operators not currently

meeting a zero discharge requirement for drilling fluids and drill cuttings (all other coastal operators including the North Slope of Alaska are already practicing zero discharge). Costs to comply with this option are estimated to be approximately \$3.9 million annually for Cook Inlet operators. EPA conducted an extensive analysis of possible waste disposal options available to Cook Inlet operators in order to estimate the costs to comply with a zero discharge requirement. The basis for this cost analysis is that approximately 76 percent of the drilling fluids and