Text A Oil pollution in the oceans Unit 3 WATER POLLUTION

On the subject of ocean pollution, it is traditional to quote Thor Heyerdahl. In 1947, he traversed the Pacific on his Kon Tiki expedition, without catching sight of people, ships or rubbish for weeks. On his second expedition in 1970, when he crossed the Atlantic with his boat the Ra II, he saw "far more oil lumps than fish." Heyerdahl concluded: "It became clear to all of us that man-kind really was in the process of polluting its most vital wellspring, our planet's indispensable filtration plant, the ocean."

But the oceans are so incredibly big that our impact on them has been astoundingly insignificant - the oceans contain more than 1,000 billion billion liters of water. The UN's overall evaluation of the oceans concludes: "The open sea is still relatively clean. Low levels of lead, synthetic organic compounds and artificial radionuclides, though widely detectable, are biologically insignificant. Oil slicks and litter are common along sea lanes, but they are a minor consequence to communities of organisms living in open-ocean waters". The lumps of oil are numerous. It is estimated that in 1985: 1) about 60 percent of the marine sources of oil pollution came from the routine tanker transport operation; 2) about 20 percent came from regular oil spills of the kind we see on TV; 3) about15 percent come from natural oil seepage at the bottom of the sea.

Routine oil pollution is due to the fact that tankers use sea water in their tanks as ballast when they sail without oil. The oil remnants get mixed into the ballast water, which on arrival gets flushed out into the harbor. Several international agreements have regulated and to a large degree reduced the extent of routine oil pollution. They demanded by law new techniques for the handling of ballast water, e.g. exploiting the fact that water and oil separate (ensuring that only the bottom layer of water is poured out on arrival), removing the last remnants of oil in the tanks (by cleaning the tanks with oil instead of water). They also demanded improved waste facilities in port and separate water ballast tanks.

Natural oil spills originate from cracks in the bottom of the sea above oil reserves. The mankind's exploitation of oil has relieved the pressure on many oil pockets and reduced the natural leak of oil. However, these two sources of oil pollution has not been documented over time.

Most tanker accidents occur close to land and the large spills affect the local fauna and flora. We are all familiar with the typical TV news scenario: oil-laden birds expiring before our eyes on the evening news, black-coated seals, the frantic cleanup efforts to avoid ecological catastrophe, and afterwards the massive bill.

Several reports begin to question whether these efforts are worth the hefty price tag.

The oil is a naturally occurring substance. During a short period, most of the oil will evaporate, degrade biologically and chemically, or form relatively harmless lumps of tar. The British official monitoring program in 1993 found that "by 1994 the contamination levels had fallen to the levels observed at sites remote from contamination."

VOCABULARY:

To traverse	Пересекать	Oil slick	Пятно нефти
Rubbish	Мусор	Sea lane	Морской путь
Oil lump	Большое количество нефти	Consequence	Последствия
Wellspring	Устье скважины, самоизлив нефти	Community	Сообщество, группа
Indispensable	Необходимый	Oil spill	Разлив нефти
Filtration plant	Оборудование для фильтрации	Oil seepage	Просачивание, выход нефти
Impact	Влияние	Sediment erosion	Размывание осадочной породы
Astoundingly	Поразительно	Ballast	Балласт
Compound	Компонент	Oil remnant	Остаток нефти
detectable	Обнаруживаемый	Flushed out	Прогонять, сгонять
Harbor	Гавань, порт	Extent	Пространство, расширение
To exploit	Эксплуатировать	To pour out	Выливать
Waste facilities	Оборудование по переработке отходов	To originate	Давать начало, порождать
To relieve	Помогать, освобождать	Leak	Утечка
Oil pocket	Нефтесборник	Presumably	Предположительно
Oil-laden	Отяжеленный нефтью	Frantic	Неистовый
To expire	Гибнуть	Price tag	Ценники на нефть
crack	Трещина	Hefty	Большой, огромный

EXECISE 1

Найдите переводы, соответствующие словосочетаниям на английском языке.

1. Sight of rubbish	A. Сливаться (быть слитым)
2. Routine tanker transport operation	B. Повседневная эксплуатация танкеров
3. To get flushed out	C. Остатки человеческой жизнедеятельности
4. Demanding by law	D. Потребовав от имени законодательства
5. To handle ballast water	E. утилизировать воду, использованную в качестве балласта
6. Exploiting the fact	F. Верхний слой
7. Extent of pollution	G. Расширение загрязнения
8. Bottom layer	H. Используя тот факт, что
9. Separate water ballast tanker	I. Танкер, спроектированный с раздельным размещением воды для балласта
10. Pressure on the oil pocket	J. Вымазанные нефтью тюлени
11. Natural leak	K. Естественная утечка
12. Black-coated seal	L. Давление на нефтесборники
13. Afterwards the massive bill	M. Огромные счета, получаемые впоследствии
14. Frantic cleanup efforts	N. Проникать из расщелин, образовавшихся на поверхности
15. To get mixed into	O. Вода и нефть не смешиваются друг с другом
16. Water and oil separate	P. Оправдывать высокую стоимость
17. To originate from cracks in the bottom	Q. Героические усилия по очистке
18. To be worth the hefty price tag	R. Смешиваться (быть смешанным)

EXECISE 2

Расставьте предложенные названия абзацев текста в правильном порядке:

- The natural properties of oil
- Our impact on the ocean
- Main sources of oil pollution
- Tanker’s operation and maintenance
- The places of big oil pollution

EXECISE 3

Добавьте в каждый абзац по предложению в соответствии с содержанием текста:

- It’s an integral part of our planet life.
- We need new technologies to provide environmentally safe operation of tanker transport.
- Don’t we pay too much for oil?
- We hope for the best.
- To sum up we can say that number of oil lumps increase.

EXECISE 4

Составьте фразы, соответствующие содержанию текста:

1.On the subject of ocean pollution, it is traditional to quote	Thor Heyerdahl.
	Charles Darvin.
	Jacques-Ives Cousteau.

2. The oceans are so incredibly big that our impact on them has been astoundingly	insignificant.
	important.
	considerable.

	numerous.
3. The lumps of oil are	insignificant..
	relatively few.

4. It is estimated that in 1985 about	60 percent	of the marine sources of oil pollution came from the routine tanker transport operation.
	40 percent	
	20 percent	

5. It is estimated that in 1985 about	40 percent	came from regular oil spills of the kind we see on TV.
	20 percent	
	5 percent	

6. It is estimated that in 1985 about	60 percent	come from natural oil seepage at the bottom of the sea.
	15 percent	

	80 percent	

EXECISE 4

Ответьте на следующие вопросы: 1. Please find and translate the opinion of Thor Heyerdahl. 2. What is the total picture of ocean pollution from different sources? 3. Please explain, how do the tankers pollute the ocean water? 4. What measures should be taken in order to avoid this pollution? 5. What are two main natural sources of oil pollution? 6. What consequences can the tankers' accidents result in? 7. Is oil a naturally occurring substance?