

ELIMINATION OF ACCUMULATED ENVIRONMENTAL DAMAGE IN THE RUSSIAN FEDERATION ARCTIC ZONE

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Protection of the environment is an essential condition for the stable development of the humankind. Elimination of accumulated environmental damage is a significant part of this global problem.

Research was conducted in accordance with the order of the Prime Minister of the Russian Federation dated June 10, 2010 "On approval of the package of measures to reduce and prevent negative impacts on the environment of the Arctic zone of the Russian Federation". Research was carried out at the Alexandra Land island, Graham-Bell island, Hooker island, Rudolfa island, Heysa island and Hoffmann island of Franz Josef Land archipelago.

Scientific research result an elaboration of a practical activity plan. The main stages of technological works on the elimination of accumulated environmental damage that were developed are:

Step 1. Comprehensive ecological survey of the Franz Joseph Land wasted territories

Step 2. Logistic operation for delivery of the workers, supplies and equipment;

Step 3. The base camp organization for work on clean-up;

Step 4. Putting into operation of production equipment, getting the first results;

Step 5. Carrying out main works on the Islands;

Step 6. Removal of the collected waste to the "Big Land";

Step 7. Summarizing the results of the executed works. The definition of plans for the next season.

For example, only for two years, only on the Franz Josef Land archipelago:

47411 drums were collected, cleaned and compacted with total weight of 1892 tons;

1744 tons of oil and fuel were collected and stored in the 50 cubic meter tanks;

2800 tons of other scrap metal were collected;

4797 tons of other waste products including wood, stones etc. were collected and stored;

34 hectares of oil-wasted land were remediated;

Alexandra Land Island is fully cleaned.

Fig 1. The characteristic of pollution of the Franz Josef Land archipelago.

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