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DEBRIS OF GEOSYNTHETIC MATERIALS ON THE SHORE OF SOUTH-EASTERN BALTIC (KALININGRAD OBLAST, RUSSIAN FEDERATION)

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Geosynthetics are widely used in hydraulic engineering and within coastal protection constructions at the Baltic Sea shore, like walls, promenades, gabions walls. Storms influence leads to deformation of some of the protection structures and cause the release of geotextiles onto the beach. Fragments of geotextile are migrating along the shore, experiencing additional degradation and destruction up to macro-, meso-, micro-particles. During October–March 2018, the Baltic Sea shore along the Sambian Peninsula (Kaliningrad Oblast of Russian Federation) was monitored to establish the contamination of sandy beaches by geotextiles that have been degraded. Several local sources of pollution of beaches by geosynthetic materials have been established. Samples were collected for further analysis. The field study was supported by RFBR via grant number 18-55-76002 ERA_a) within the ERANET-Rus joint project EI-Geo, preliminary estimation of locations of polluted areas was made within State Assignment of FASO Russia 0149-2018-0012.