



EESTI AKREDITEERIMISKESKUS  
ESTONIAN ACCREDITATION CENTRE

**LISA Eesti Keskkonnauuringute Keskuse akrediteerimistunnistusele nr PT02**  
*ANNEX to the accreditation certificate No PT02 of Estonian Environmental Research Centre Llc*

**1. Akrediteerimisulatus on:**

*Accreditation scope is:*

<b>Uuritav materjal</b> <b>Tested material</b>	<b>Määratav näitaja</b> <b>Analysed parameter</b>	<b>Juhend</b> <b>Procedure</b>
1. Heit- ja reovesi <i>Waste water and effluent</i>	<p><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, <math>SO_4^{2-}</math>, BHT<sub>7</sub>, pH, KHT<sub>Cr</sub>, N<sub>üld</sub>, <math>PO_4^{3-}</math>, P<sub>üld</sub>, hõljuvaine, metallid (Cd, Hg, Cu, Pb, Zn, Ni, Cr), naftasaadused (süsivesinikud C<sub>10</sub> -C<sub>40</sub>), fenooliindeks, 1-aluselised fenoolid (o-kresool, m-kresool, p-kresool, 2,3-dimetüülfenool, 2,6-dimetüülfenool, 3,4-dimetüülfenool, 3,5-dimetüülfenool), 2-aluselised fenoolid (resortsinool, 2,5-resortsinool, 5-metüülresortsinool)</p> <p><i><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, <math>SO_4^{2-}</math>, BOD<sub>7</sub>, pH, COD<sub>Cr</sub>, N<sub>total</sub>, <math>PO_4^{3-}</math>, P<sub>total</sub>, suspended solids, metals (Cd, Hg, Cu, Pb, Zn, Ni, Cr), oil products (hydrocarbons C<sub>10</sub> - C<sub>40</sub>), phenol index, monohydric phenols (o-cresol, m-cresol, p-cresol, 2,3-dimethylphenol, 2,6-dimethylphenol, 3,4-dimethylphenol, 3,5-dimethylphenol), dihydric phenols (resorcinol, 2,5-resorcinol, 5-resorcinol)</i></p>	KJ-16
2. Pinnavesi <i>Surface water</i>	<p><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, N<sub>üld</sub>, <math>PO_4^{3-}</math>, P<sub>üld</sub>, Cl<sup>-</sup>, <math>SO_4^{2-}</math>, <math>HCO_3^-</math>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, K<sup>+</sup>, Na<sup>+</sup>, lahustunud silikaadid, Fe<sub>üld</sub>, BHT<sub>7(5)</sub>, KHT<sub>Mn</sub>, pH, elektrijuhtivus, hõljuvaine, üldkaredus, klorofüll-a, üldorgaaniline süsinik (TOC), värvus, naftasaadused (süsivesinikud C<sub>10</sub> -C<sub>40</sub>), 1-aluselised fenoolid (o-kresool, m-kresool, p-kresool, 2,3-dimetüülfenool, 2,6-dimetüülfenool, 3,4-dimetüülfenool, 3,5-dimetüülfenool), 2-aluselised fenoolid (resortsinool, 2,5-resortsinool, 5-metüülresortsinool)</p> <p><i><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, N<sub>total</sub>, <math>PO_4^{3-}</math>, P<sub>total</sub>, Cl<sup>-</sup>, <math>SO_4^{2-}</math>, <math>HCO_3^-</math>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, K<sup>+</sup>, Na<sup>+</sup>, dissolved silicates, total Fe, BOD<sub>7(5)</sub>, COD<sub>Mn</sub>, pH, conductivity, suspended solids, hardness, colour, TOC, chlorofyll-a, oil products (hydrocarbons C<sub>10</sub> - C<sub>40</sub>), phenol index, monohydric phenols (o-cresol, m-cresol, p-cresol, 2,3-dimethylphenol, 2,6-dimethylphenol, 3,4-dimethylphenol, 3,5-dimethylphenol), dihydric phenols (resorcinol, 2,5-resorcinol, 5-resorcinol)</i></p>	KJ-16

Uuritav materjal Tested material	Määratav näitaja Analysed parameter	Juhend Procedure
<p>3. Põhjavesi Ground water</p>	<p><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, <math>Cl^-</math>, <math>SO_4^{2-}</math>, <math>HCO_3^-</math>, <math>Ca^{2+}</math>, <math>Mg^{2+}</math>, <math>K^+</math>, <math>Na^+</math>, <math>Fe_{üld}</math>, <math>Fe^{2+}</math>, <math>P_{üld}</math>, lahustunud silikaadid, <math>KHT_{Mn}</math>, pH, elektrijuhtivus, kuivjääk, üldkaredus, värvus, hägusus, <math>F^-</math>, <math>CN^-</math>, metallid (Al, As, B, Ba, Cd, Cr, Co, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Se, Zn), benseen, 1-aluselised fenoolid (o-kresool, m-kresool, p-kresool, 2,3-dimetüülfenool, 2,6-dimetüülfenool, 3,4-dimetüülfenool, 3,5-dimetüülfenool), 2-aluselised fenoolid (resortsinool, 2,5-resortsinool, 5-metüülresortsinool), pestitsiidid (1,2,3-triklorobenseen; 1,2,4-triklorobenseen; 1,3,5-triklorobenseen; 1,2,3,5-tetraklorobenseen; 1,2,3,4 ja 1,2,4,5-tetraklorobenseen (koos); pentaklorobenseen; heksaklorobenseen; aldrin; dieldrin; endrin; isodrin; p,p'-DDD; p,p'-DDE; p,p'-DDT; diklobeniil; alfa-endosulfaan; alfa-heksaklorotsükloheksaan; beeta-heksaklorotsükloheksaan; gamma-heksaklorotsükloheksaan; heptakloor; heptakloor-eksoepoksiid; heptakloor-endoepoksiid; heksaklorobutadien; isobensaani; kvintoseen), polüaromaatsed süsivesinikud (antratseen, atsenafteen, atsenafteen, benso(a)antratseen, benso(a)püreen, benso(b)fluoranteen, benso(g,h,j)perüleen, benso(k)fluoranteen, dibenso(a,h)antratseen, fenantreen, fluoranteen, fluoreen, indeno(1,2,3-cd)püreen, krüseen, naftaleen, püreen.</p> <p><i><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, <math>Cl^-</math>, <math>SO_4^{2-}</math>, <math>HCO_3^-</math>, <math>Ca^{2+}</math>, <math>Mg^{2+}</math>, <math>K^+</math>, <math>Na^+</math>, total Fe, <math>Fe^{2+}</math>, <math>P_{total}</math>, dissolved silicates, <math>COD_{Mn}</math>, hardness, total dissolved solids, pH, conductivity, colour, turbidity, <math>F^-</math>, <math>CN^-</math>, metals (Al, As, B, Ba, Cd, Cr, Co, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Se, Zn), benzene, phenol index, monohydric phenols (o-cresol, m-cresol, p-cresol, 2,3-dimethylphenol, 2,6-dimethylphenol, 3,4-dimethylphenol, 3,5-dimethylphenol), dihydric phenols (resorcinol, 2,5-resorcinol, 5-resorcinol), pesticides (1,2,3-trichlorobenzene; 1,2,4-trichlorobenzene; 1,3,5-trichlorobenzene; 1,2,3,5-tetrachlorobenzene; 1,2,3,4 and 1,2,4,5-tetrachlorobenzene (sum); pentachlorobenzene; hexachlorobenzene; aldrin; dieldrin; endrin; isodrin; p,p'-DDD; p,p'-DDE; p,p'-DDT; dichlobenil; alpha-endosulfan; alpha-hexachlorocyclohexane; beta-hexachlorocyclohexane; gamma-hexachlorocyclohexane; heptachlor; heptachlor exo-epoxide; heptachlor endo-epoxide; hexachlorobutadiene; isobenzan; quintozene), polyaromatic hydrocarbons (anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,j)perylene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, phenanthrene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, chrysene, naphthalene, pyrene).</i></p>	<p>KJ-16</p>

<b>Uuritav materjal</b> <i>Tested material</i>	<b>Määratav näitaja</b> <i>Analysed parameter</i>	<b>Juhend</b> <i>Procedure</i>
4. Merevesi <i>Sea water</i>	$NH_4^+$ , $NO_2^-$ , $NO_3^-$ , $N_{\text{üld}}$ , $PO_4^{3-}$ , $P_{\text{üld}}$ , klorofüll-a, lahustunud silikaadid, pH, elektrijuhtivus.  <i><math>NH_4^+</math>, <math>NO_2^-</math>, <math>NO_3^-</math>, <math>N_{\text{total}}</math>, <math>PO_4^{3-}</math>, <math>P_{\text{total}}</math>, chlorophyll-a, dissolved silicates, pH, conductivity.</i>	KJ-16
5. Reoveesetted <i>Sewage sludge</i>	Metallid (Cd, Hg, Cu, Pb, Zn, Ni, Cr, As, Mn), $P_{\text{üld}}$ , $N_{\text{üld}}$ , TOC, pH, K, kuivaine  <i>Metals (Cd, Hg, Cu, Pb, Zn, Ni, Cr, As, Mn), <math>P_{\text{total}}</math>, <math>N_{\text{total}}</math>, TOC, pH, K, total solids</i>	KJ-16

**2. Tegevust teostav struktuuriüksus:** Kvaliteeditagamise, keskkonnakaitse, tervishoiu ohutuse osakond

*Part of legal entity that provides activity: Department of quality assurance, environmental protection, health and safety*

**Võrdluskatsete korraldamine:**

*Proficiency testing provider:*

Marja 4d, Tallinn

Suur-Sõjamäe 34, Tallinn

**3. Asutus on akrediteeritud standardi EVS-EN ISO/IEC 17043:2010 nõuete suhtes**

*Organisation is accredited against the requirements of standard EVS-EN ISO/IEC 17043:2010*

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Kristiina Saarniit  
EAK juhataja  
*Director of EAK*  
Tallinn, 16.05.2018

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