

CORRIGENDUM

**“FUZZY MULTIPLE CRITERIA ASSESSMENT OF NON-HAZARDOUS WASTE INCINERATION PLANT CONSTRUCTION SITE ALTERNATIVES IN VILNIUS CITY BY APPLYING ARAS-F AND AHP METHODS”
(doi:10.3846/16486897.2011.645827)**

Zenonas Turkskis, Marius Lazauskas and Edmundas Kazimieras Zavadskas, authors of article *Fuzzy multiple criteria assessment of non-hazardous waste incineration plant construction site alternatives in Vilnius city by applying ARAS-F and AHP methods*, published in 07 Jun 2012, would like to make following correction in the Table 8 on page 117, in the fourth paragraph of Problem solving with the help of the Fuzzy Additive Ratio Assessment (ARAS-F) method on page 116 and in the third/seventh paragraph on page 117.

“According to the solution results could be stated that alternatives are follows:

$$a_7 \succ a_6 \succ a_3 \succ a_5 \succ a_1 \succ a_4 \succ a_2.”$$

“Application of the AHP and the ARAS-F combination revealed that the most suitable site for the waste incineration plant is the alternative a_7 . This site is located near the 8th regional boiler house. The most unsuitable place is alternative a_2 (territory in Kirtimai industrial region).”

“According to the calculated results it was observed that the most convenient place for construction of non-hazardous waste incineration plant in Vilnius city is located near the 8th regional boiler house. (Fig. 1, No 7). As the most unsuitable area determined during the assessment of possible alternatives for waste incineration plant construction is located near in the Kirtimai industrial region (Fig. 1, No 2).“

Table 8. Solution results

		Alternatives							
		a_0	a_1	a_2	a_3	a_4	a_5	a_6	a_7
Fuzzy weights	$\tilde{S}_{\alpha i} = \sum_{j=1}^{10} \left(\frac{x_{ij}}{\sum_{j=1}^{10} x_{ij}} \right) \cdot \omega_{\alpha,j}$	0.117	0.033	0.021	0.058	0.022	0.026	0.063	0.105
	$\tilde{S}_{\beta i} = \sum_{j=1}^{10} \left(\frac{x_{ij}}{\sum_{j=1}^{10} x_{ij}} \right) \cdot \omega_{\beta,j}$	0.230	0.069	0.047	0.127	0.057	0.081	0.134	0.182
	$\tilde{S}_{\gamma i} = \sum_{j=1}^{10} \left(\frac{x_{ij}}{\sum_{j=1}^{10} x_{ij}} \right) \cdot \omega_{\gamma,j}$	0.390	0.136	0.107	0.230	0.134	0.164	0.225	0.282
Value of optimality function i -th alternative	$S_i = \frac{1}{3}(S_{i\alpha} + S_{i\beta} + S_{i\gamma})$	0.245	0.079	0.058	0.138	0.071	0.090	0.141	0.190
Utilitee degree	$K_i = \frac{S_i}{S_0}$	1.000	0.323	0.238	0.562	0.288	0.368	0.573	0.773