Supplementary materials for

Research on Groundwater Pollution Transport in Plain-Type Landfills Based on Numerical Simulation: Coupled Impacts of Climate Change and Human Activities

Tengchao Li [1,3], Shengyan Zhang [1,3], Yuqin He [2], Ninghao Wang [2], Shujie Hu [1], Zhuoqian Li [1], Henghua Gong [2], Tianye Wang [2]*

[1] Ecological Environment Geo-Service Center of Henan Geological Bureau, Zhengzhou, China (S.Z., 13938487512@163.com; T.L., 15136131510@163.com; S.H., 17814952656@163.com; Z.L., zhuoqianli@126.com)

[2] School of Water Conservancy and Transportation, Zhengzhou University, Zhengzhou, China (H.G., ghh123666@163.com; T.W., wangtianye@zzu.edu.cn; N.W., wnh0501@163.com; Y.H., 18980126168@163.com)

[3] Technology Research Center for Mine Environment and Ecological Restoration Engineering of Henan Province, Zhengzhou, China

* Correspondence: wangtianye@zzu.edu.cn

Table S1. Monthly average precipitation and evapotranspiration in the study area from 2021 to 2024.

Month	Precipitation (mm)	Evapotranspiration (mm)	Month	Precipitation (mm)	Evapotranspiraton (mm)
Jan.	8.09	11.95	Jul.	247.31	104.56
Feb.	15.41	19.01	Aug.	109.57	115.97
Mar.	19.30	46.02	Sep.	102.09	69.30
Apr.	24.44	57.74	Oct.	28.87	41.17
May	21.20	48.30	Nov.	19.26	23.01
Jun.	38.93	47.63	Dec.	5.45	13.77

Table S2. Statistical characteristic values of groundwater levels at W0 under different future simulation scenarios (2025–2040).

Scenarios	Mean water level (m)	Maximun water level (m)	Minimum water level (m)	Final water level (2024.12) (m)
S0	58.3	58.8	57.3	58.7
S1	58.4	59.0	57.4	58.9
S2	58.6	59.4	57.7	58.9
S3	57.9	58.6	57.0	58.5
S4	57.6	58.4	56.6	58.2