Fate of Organohalogens in U.S. Wastewater Treatment Plants and Estimated

Chemical Releases to Soils Nationwide from Biosolids Recycling

Jochen Heidler and Rolf U. Halden*

8 Pages

* Corresponding author

Supplemental Information

Table S-1. Method recoveries and method detection limits for the various analytes.

Compound	Recovery (% ± SD)			Method Detection Limit (ppb)			Limit of Quantification	Calibration internal or external
	Influent	Effluent	Sludge	Influent*	Effluent*	Sludge	(pg)	(R ²)
Carbanilide	77 ± 4	94 ± 18	42 ± 12	0.02	0.01	1.3	0.1	0.997
DCC	66 ± 16	112 ± 15	69 ± 19	0.05	0.01	0.9	0.1	0.997
Dichlorophene	66 ± 8	142± 44	47 ± 15	0.04	0.03	0.5	0.1	0.998
Diflubenzuron	89 ± 17	184 ± 12	60 ± 15	0.32	0.01	0.4	5	0.997
Fipronil	112 ± 4	165 ± 22	53 ± 10	0.02	0.01	0.4	0.1	0.999
Linuron	108 ± 22	100 ± 26	N/A	0.12	0.03	N/A	0.5	0.995
Hexachlorophene	54 ± 6	16 ± 1	8 ± 6	0.06	0.02	0.2	0.5	0.995
Hexaflumuron	54 ± 17	39 ± 9	69 ± 13	0.11	0.02	0.6	1	0.997
TCC	81 ± 35	39 ± 3	91 ± 8 ¹	0.1	0.01	3.9	25	0.998
TCS	58 ± 17	57 ± 17	78 ± 14 ²	0.25 ²	0.02 ²	1.0 ²	25	0.998
TetCC	46 ± 7	37 ± 15	73 ± 20	0.04	0.02	1.1	0.1	0.996

* Italics indicates calculated data

¹ taken from Heidler, J.; Sapkota, A.; Halden, R. U. Partitioning, persistence, and accumulation in digested sludge of the topical antiseptic triclocarban during wastewater treatment. Environ. Sci. Technol. 2006, 40, 3634-3639.

² taken from Heidler, J.; Halden, R. U. Mass balance assessment of triclosan removal during conventional sewage treatment.

Chemosphere. 2007, 66, 362-369.

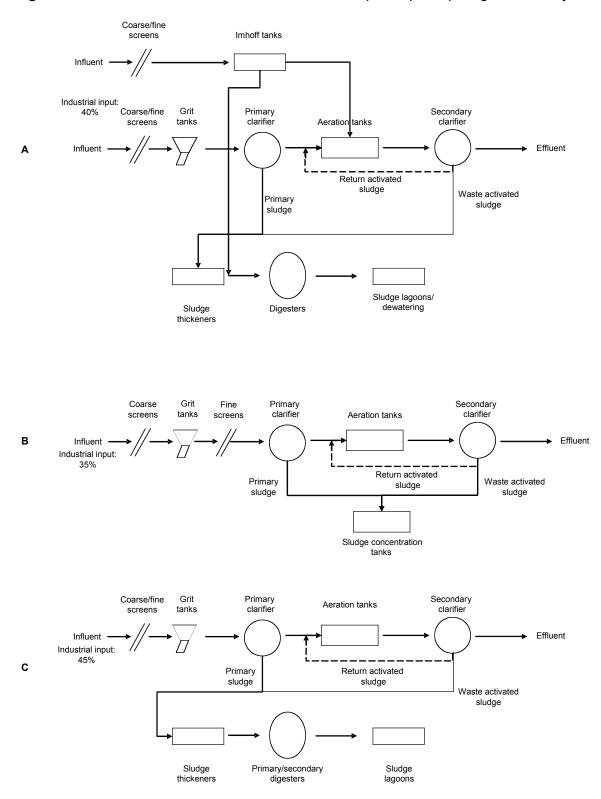
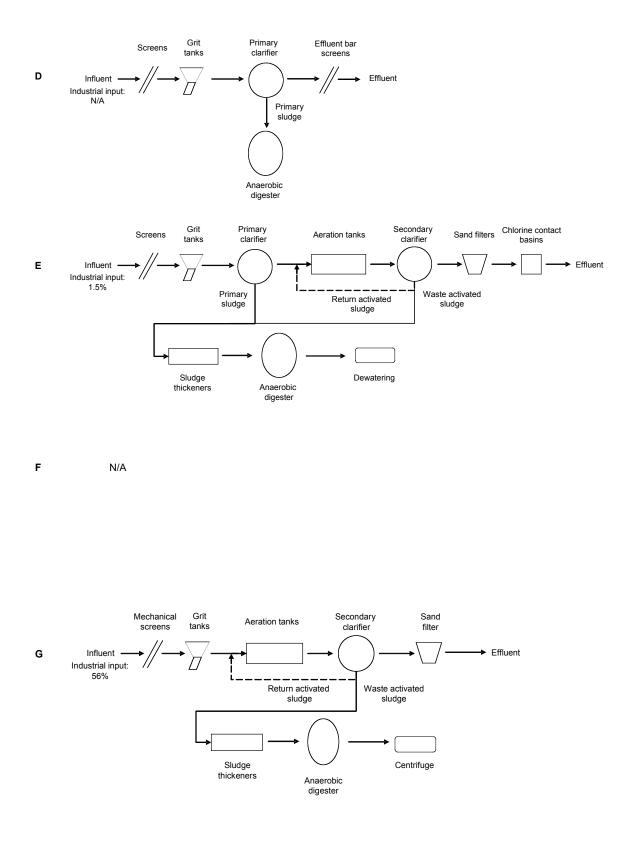
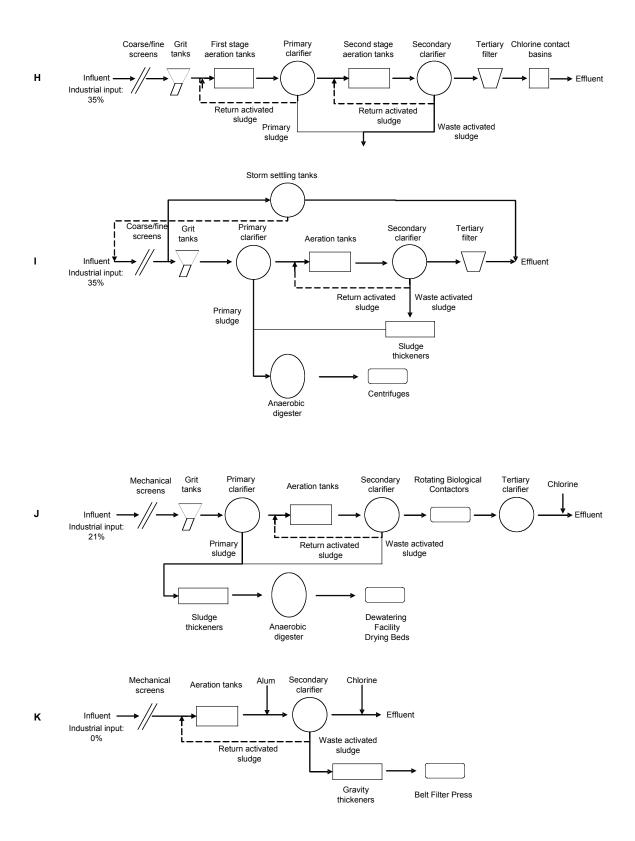
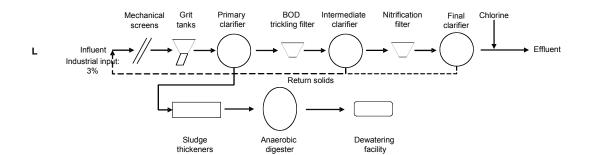
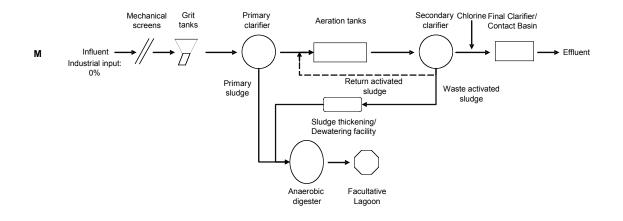


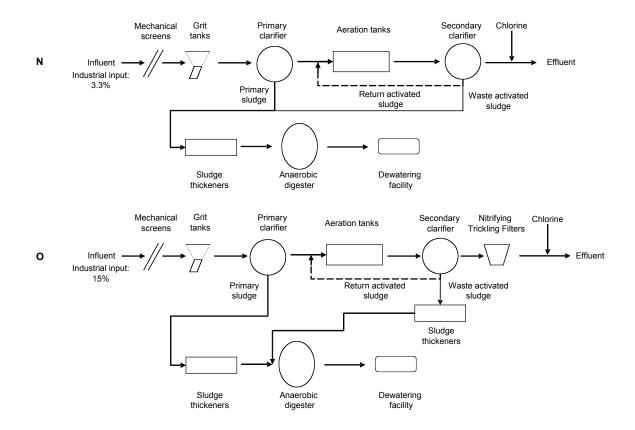
Figure S-1. Treatment trains of wastewater treatment plants participating in this study.

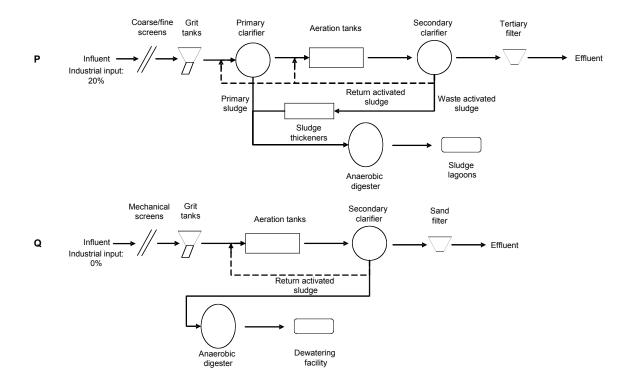


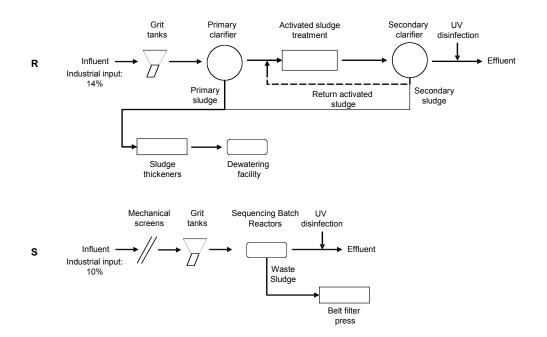


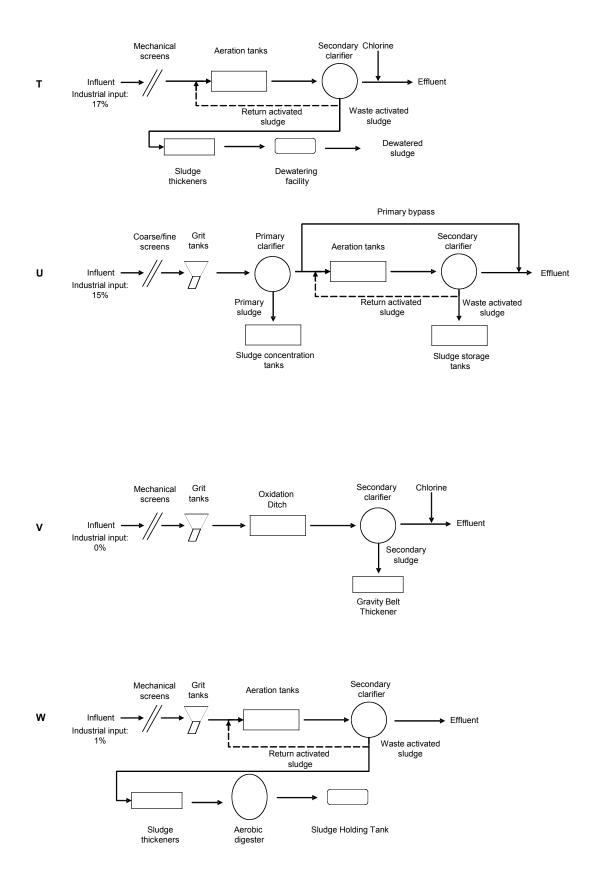


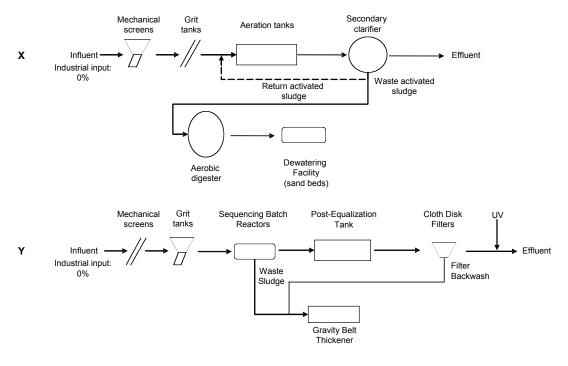












(N/A, undisclosed)