

**Attachment 1 (HIDOH January 27, 2022; rev 09/06/2022)
Derivation of JP-5 TPH Tapwater Action Levels**

Table 6. ¹Theoretical, relatively makeup of dissolved-phase hydrocarbon mixture in water based on effective solubilities of components in fresh JP-5 at saturation and grouped in terms of carbon range toxicity factors (refer to Table 1, Table 4 and Table 5).

Chemical/ Carbon Range	²Relative Hydrocarbon Makeup of Neat Fuel	³Relative Carbon Range Makeup of Dissolved-Phase Hydrocarbons	⁴Relative BTEXMN Makeup of Dissolved-Phase Hydrocarbons	⁵Relative Volatile Carbon Range Makeup of Dissolved-Phase Hydrocarbons	⁶Relative CR+BTEXMN Makeup of Dissolved-Phase Hydrocarbons
Total BTEXMN:	11%				65%
Total Carbon Ranges:	89%				35%
Benzene	0.03%		6.7%		4.3%
Toluene	0.10%		5.6%		3.6%
Ethylbenzene	0.0%		0.00%		0.00%
Xylenes	4.6%		74%		48%
1-Methylnaphthalene	3.5%		6.2%		4.0%
2-Methylnaphthalene	0.00%		0.00%		0.00%
Naphthalene	3.0%		7.1%		4.6%
C5-C8 Aliphatics	12%	11%		11%	4.0%
>C8-C18 Aliphatics	68%	1.0%		1.0%	0.37%
>C18-C32 Aliphatics	0.00%	0.00%		0.0%	0.00%
>C8 Aromatics	9.0%	88%		88%	31%
Sum:	100%	100%	100%	100%	100%

Notes

1. Theoretical makeup of dissolved-phase hydrocarbons assuming fresh spill in direct contact with fresh JP-5 fuel and individual components present in water at maximum effective solubility.
2. Refer to Table 4.
3. Relative makeup of dissolved-phase carbon ranges (used to derive weighted oral and dermal toxicity factors for non-degraded TPH compounds in Table 7).
4. Relative makeup of dissolved-phase, BTEXMN compounds (for general reference only).
5. Relative makeup of dissolved-phase, volatile carbon range compounds; used to derive weighted inhalation toxicity factor for non-degraded TPH compounds in Table 7).
6. Combined carbon range and BTEXMN components (used to derive weighted oral and dermal toxicity factors for non-degraded TPH compounds in Table 7).