

listed waste appears inappropriate, given that the F004 waste could not be disposed with the treatment sludge as non hazardous waste. Therefore, we are proposing that wastes that are already classified as hazardous wastes would not be subject to listing as K181.

If the above example is modified, such that the F004 waste is generated in commingled form with the wastewater treatment sludge (e.g., from commingled wastewaters), then the waste would be F004, regardless of the mass levels present in the K181 constituents of concern. EPA has not evaluated all of the hazardous constituents reasonably expected to be present in F004 wastes and set levels at which it is safe to dispose of them in nonhazardous waste landfills with or without composite liners. In this case, therefore, our proposed approach would mean that the F004 wastes would remain hazardous, but the waste would not be subject to the K181 listing.

### C. Why Are We Proposing Not To List Wastewaters?

As described previously in section III.E.3, we evaluated the potential management of wastewaters from dyes and/or pigments production in two scenarios: Tanks and lined surface impoundments. After consideration of the risk assessment modeling results, the plausibility of each management scenario, and the level of environmental protection provided by existing and upcoming air regulations, we are proposing not to list wastewaters from dyes and/or pigments production. Our logic supporting this determination is presented below.

#### 1. Air Emissions From Tanks and Surface Impoundments

We assessed air emissions from both tanks and surface impoundments, as previously described, and calculated mass loadings for those CoCs with inhalation toxicity benchmarks. Because

the modeled mass loading results for these scenarios were very similar, we are presenting a combined analysis of these results here.

As discussed previously in section III.G.2.g, we assumed that calculated allowable loadings in excess of 100,000 kg/yr were implausible and therefore screened out those constituents for which our modeling gave a calculated allowable loading in excess of 100,000 kg/yr.

Ten constituents had calculated allowable loadings less than 100,000 kg/yr. Table IV-5 presents these CoCs, the modeled allowable loading results for tanks and surface impoundments (synthetic lined), theoretical concentrations (using the estimated average wastewater quantity), a summary of available analytical data, and total onsite and offsite releases reported in the TRI by the dyes and/or pigments production industries.

TABLE IV-5.—ANALYSIS OF AIR PATHWAY LOADING RESULTS

Constituent of concern	Calculated allowable loading for tanks/surface impoundments (kg/yr)	Theoretical wastewater concentration for tanks/surface impoundments (ppm)	Available analytical data for wastewaters (ppm)	TRI: D&P industry total on- and off-site releases (kg/yr, RY2000)
Naphthalene .....	2,200/2,200	3.6/3.6	0.011–0.1	1,294
o-Toluidine .....	2,600/2,400	4.2/3.9	0.044–0.16	234
Aniline .....	2,700/1,500	4.4/2.4	0.66–120	237,100
Azobenzene .....	3,700/2,400	5.2/3.9	0.093–0.104	( <sup>3</sup> )
o-Anisidine .....	9,500/2,900	15.5/4.7	0.76	0
p-Cresidine .....	50,000/13,000	81.3/21.1	( <sup>1</sup> )	5,680
Formaldehyde .....	>100,000/14,000	>160/22.8	0.064–0.819	10,962
Toluene-2,4-diamine .....	>100,000/51,000	>160/82.9	( <sup>2</sup> )	817
1,2-Dichlorobenzene .....	71,000/63,000	115/102	0.004–0.059	31,490
Benzidine .....	>100,000/89,000	>160/145	0.0055–0.023	0

<sup>1</sup> Not reported

<sup>2</sup> Not analyzed.

<sup>3</sup> Not a TRI constituent.

With the exception of aniline (discussed further below), we believe that it is highly unlikely that these constituents would be present at levels above the calculated allowable mass loadings in any facility's wastewaters. Our assessment of the TRI releases reported by the dyes/pigments industries indicates that the total releases from the entire industry are less than the calculated allowable mass loading limits predicted by our risk assessment modeling that would be applied on a facility-specific basis (except for aniline). For example, total reported releases of naphthalene by dye and/or pigments manufacturers were 1,294 kg/yr, which is less than the calculated allowable loading level of 2,200 kg/yr. This comparison greatly overestimates potential wastewater

levels because total TRI releases include releases from all facilities to air and land, as well as water.

The available analytical data support the TRI analysis, showing that (with the exception of aniline), these constituents are unlikely to be present in dyes and/or pigments wastewaters at concentrations high enough to result in mass loadings above the calculated allowable levels. The theoretical concentrations presented in the table above assume an average wastewater quantity of 615,000 MT/yr. The majority of the facilities in this industry are expected to generate lower wastewater quantities (*i.e.*, the median wastewater quantity is 119,000 MT/yr), and thus the theoretical concentration of these constituents in these wastewaters at the

calculated allowable levels would be even higher, and thus more implausible.

Aniline, however, may in fact be present in dyes and/or pigments industry wastewaters at levels exceeding the calculated allowable loading of 2,700 kg/yr. Of the four dyes and/or pigments manufacturers reporting aniline releases in the TRI, two report releases of aniline-bearing wastewaters to POTWs in excess of 2,700 kg/yr, and are presumably managing these wastewaters in tanks prior to discharge. One of these two facilities (BASF/Huntington, WV) is operating under a state air permit that limits the actual aniline air emissions from wastewater treatment to levels well below the potential wastewater loading limit for aniline (permit available in docket for today's rulemaking). The