

As discussed in the previous section, we considered two factors, plausible mismanagement and other regulatory actions (§§ 261.11(a)(3)(vii) and 261.11(a)(3)(x)) in establishing the waste management scenario(s) modeled in the risk assessment.

One of the remaining factors of the eleven listed in 261.11(a)(3) is consideration of damage cases (§ 261.11(a)(3)(ix)); this is discussed in section G.5 below. The final factor allows EPA to consider other factors as appropriate (§ 261.11(a)(3)(xi)).

EPA conducted analyses of the risks posed by the wastes evaluated for this listing to determine the mass loadings of constituents that, if found in dyes and/or pigments production wastes, would meet the criteria for listing set forth in § 261.11(a)(3). Section G discusses the human health risk analyses and ecological risk screening analyses EPA conducted to support our proposed listing determinations for dyes and/or pigments production wastes. We consider the risk analyses in developing our listing decisions for each of the wastes.

G. Overview of the Risk Assessment

We conducted a risk assessment to calculate the mass loadings of

individual constituents that can be present in waste and remain below a specified level of risk to both humans and the environment.

To establish these listing levels, we: (1) Selected constituents of potential concern in wastes from dyes and/or pigments production, (2) evaluated plausible waste management scenarios (as described previously in section III.E), (3) calculated exposure concentrations by modeling the release and transport of the constituents from the waste management unit to the point of exposure, and (4) calculated waste constituent loadings that are likely to pose unacceptable risk. In addition, we conducted a screening level ecological risk assessment to ensure that the loading limits were protective of the environment.

The following sections explain the selection of the constituents that we evaluated in the risk assessment and present an overview of the analysis we used to calculate risk-based listing levels for nonwastewaters and wastewaters from dyes and/or pigments production. Details of the risk assessment are provided in the Risk Assessment Background Document, which is in the docket for today's rule.

1. How Did EPA Chose Potential Constituents of Concern?

Our overall goal in choosing potential constituents of concern was to identify a list of chemicals that could reasonably be expected to be associated with wastes from the production of azo, triarylmethane, perylene or anthraquinone dyes or pigments and that could be derived entirely from sources that were not restricted by the *Magruder* injunction.

We first created a primary list of all of the chemicals identified in a series of non-CBI data sources, and then removed from that list those compounds not expected to have toxicity benchmarks and those chemicals not expected to be directly linked with the manufacture of the dyes and pigments of concern. This process ultimately resulted in the identification of 35 constituents of concern (CoC) (*see* Table III–1 below) that we further assessed via risk assessment. The details of this analysis are described in “Background Document: Development of Constituents of Concern for Dyes and Pigments Listing Determination,” available in the docket for today's proposal.

TABLE III–1.—DYES AND PIGMENTS CONSTITUENTS OF CONCERN

Chemical compound	Synonyms	CAS
Aminoanthraquinone	2-Aminoanthraquinone	117–79–3
Aniline	Benzenamine; aminobenzene	62–53–3
o-Anisidine	2-Methoxyaniline, 2-methoxybenzenamine	90–04–0
Azobenzene	Diphenyldiazene, diphenyl diimide	103–33–3
Barium .....	.....	7440–39–3
Benzaldehyde .....	.....	100–52–7
Benzidine .....	.....	92–87–5
4–4'-bis(dimethylamino) benzophenone ...	.....	90–94–8
4-Chloroaniline	p-Chloroaniline	106–47–8
Copper .....	.....	7440–50–8
p-Cresidine	2-Methoxy-5-methylbenzenamine, 3-amino-4-methoxytoluene	120–71–8
p-Cresol	4-Methylphenol	106–44–5
1,2-Dichlorobenzene	o-Dichlorobenzene	95–50–1
3,3'-Dichlorobenzidine	3,3'-Dichlorobiphenyl-4,4'-ylenediamine	91–94–1
3,3'-Dimethoxybenzidine	Dianisidine	119–90–4
2,4-Dimethylaniline	2,4-Xylidine	95–68–1
N,N-Dimethylaniline	N,N-Dimethylbenzenamine	121–69–7
3,3'-Dimethylbenzidine	4,4'-bi-o-Toluidine, diaminoditolyl	119–93–7
Diphenylamine	N-Phenylbenzeneamine	122–39–4
Formaldehyde .....	.....	50–00–0
Lead .....	.....	7439–92–1
Methanol .....	.....	67–56–1
4,4'-Methylenedianiline	p-p'-Diaminodiphenyl methane; 4,4'-methylene-bis[benzenamine]	101–77–9
Naphthalene .....	.....	91–20–3
5-Nitro-o-anisidine	2-methoxy-5-nitroaniline	99–59–2
5-Nitro-o-toluidine	2-methyl-5-nitroaniline; 2-amino-4-nitrotoluene	99–55–8
Phenol .....	.....	108–95–2
1,2-Phenylenediamine	o-phenylenediamine, 2-aminoaniline	95–54–5
1,3-Phenylenediamine	3-Aminoaniline, m-phenylenediamine	108–45–2
1,4-Phenylenediamine	4-aminoaniline; p-Phenylenediamine	106–50–3
Sodium nitrite .....	.....	7632–00–0
Toluene-2,4-diamine	4-m-tolylenediamine, 2,4-diaminotoluene, 4-methyl-m- phenylenediamine	95–80–7
o-Toluidine	2-toluidine; 2-aminotoluene	95–53–4
p-Toluidine	4-toluidine; 4-aminotoluene	106–49–0