



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Apr 20, 2004

CERTIFIED MAIL 7000 0520 0021 6108 9793
RETURN RECEIPT REQUESTED

In Reply Refer To: CWA-307-9-04-028

Gene Hutchinson, Owner
Custom Chrome and Bumper
335 Garden Highway
Yuba City, California 95991

Dear Mr. Hutchinson:

This administrative order requires Custom Chrome and Bumper to cease dilution as a substitute for treatment and to collect representative samples. These requirements are necessary because sampling is invalidated by dilution from the continuous operation of the overflow rinses and by the unmonitored discharge of spents. This means compliance with the sewer discharge requirements for Custom Chrome and Bumper currently cannot be determined through sampling. Therefore, it also cannot be concluded that Custom Chrome and Bumper can continue to discharge without treatment. The key dates are as follows:

KEY DATES	ADMINISTRATIVE ORDER CWA-307-9-04-028
05/28/04	1. Submit written responses to the February 26, 2004 inspection report. 5. Submit toxic organic management plan.
06/01/04	6-7. Begin one year of self-monitoring under this Order. Continuous pH measurements from the outside sample box or hourly pH measurements from the individual rinse tanks inside. Monthly sampling for metals, cyanide, salts and discharge flow rate. Additional sampling of the spent solutions discharged to the sewers.
06/28/04	2. Submit a preliminary engineering plan of corrective actions.
07/28/04	3. Retrofit to on-demand rinsing - Submit a notice of completion.
12/28/04	4. Install any necessary treatment - Submit a notice of completion.
05/31/05	End self-monitoring under this Administrative Order.
* * *	Self-monitoring reports are due on the 28th day of each month for the samples collected during the previous calendar month.

The enclosed Finding of Violation and Administrative Order is issued pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act (The Act) as amended [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)]. The Finding of

Violation relates to the failure of Custom Chrome and Bumper to comply with the prohibition against Adilution as a substitute for treatment@. This Finding of Violation is based on our February 26, 2004 inspection report and our review of Yuba City=s records. The inspection report is by reference made a part of this Finding of Violation and Administrative Order.

Any violation of the terms of this Administrative Order or pretreatment standards could subject Custom Chrome and Bumper to a civil action for appropriate relief pursuant to Section 309(b) of the Act [33 U.S.C. Section 1319(b)] and/or penalties under Section 309(d) of the Act [33 U.S.C. Section 1319(d)] of up to \$31,500 per day of violation. In addition, under Section 309(g) of the Act [33 U.S.C. Section 1319(g)], any violation of the pretreatment standards could also subject Custom Chrome and Bumper to an administrative penalty action of up to \$12,000 per day of violation not to exceed \$157,500. Sections 309(c)(1), (c)(2) and (c)(4) of the Act [33 U.S.C. Section 1319(c)(1), (c)(2) and (c)(4)] also provide penalties for negligent violations, knowing violations and knowingly making false statements.

The request for information included in this Administrative Order is not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because it is not an Ainformation collection request@ within the meaning of 44 U.S.C. Sections 3502(4), 3502(11), 3507, 3512, and 3518. Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons [44 U.S.C. Section 3502(4), 3502(11) and 5 CFR Section 1320.5(a)].

EPA has promulgated regulations to protect the confidentiality of the business information it receives. These regulations are set forth in 40 CFR Part 2, Subpart B and in the Federal Register at 41 F.R. 36902 (September 1, 1976) and 43 F.R. 40000 (September 8, 1978). A claim of business confidentiality may be asserted in the manner specified by 40 CFR Section 2.203(b) for part or all of the information requested. EPA will disclose business information covered by such a claim only as authorized under 40 CFR Part 2, Subpart B. If no claim accompanies the business information at the time EPA receives it, EPA may make it available to the public without further notice. Custom Chrome and Bumper may not withhold from EPA any information on the grounds that it is confidential.

If you have any questions regarding this matter, please contact Greg V. Arthur of my staff at (415) 972-3504 or at arthur.greg@epa.gov.

Sincerely,

Original signed by:
Alexis Strauss

Alexis Strauss
Director, Water Division

Enclosure

cc: Mike Paulucci, Yuba City
Melissa Hall, RWQCB-Sacramento

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the Matter of)	
)	
Custom Chrome and Bumper)	FINDING OF VIOLATION
Yuba City, California)	
)	AND ORDER
Proceedings under Section 308(a) and 309(a)(3),)	
(a)(4) and (a)(5)(A) of the Clean Water Act, as)	Docket No. CWA-307-9-04-028
amended, 33 U.S.C. Section 1318(a) and)	
1319(a)(3), (a)(4) and (a)(5)(A))	

STATUTORY AUTHORITY

The following Finding of Violation and Order (Docket No. CWA-307-9-04-028) is issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)] (hereinafter the Act). This authority has been delegated by the Administrator and the Regional Administrator of EPA Region 9 to the Director of the Water Division of EPA Region 9.

FINDING OF VIOLATION

The Director of the Water Division of EPA Region 9 finds that Custom Chrome and Bumper in Yuba City is in violation of Section 307(d) of the Act [33 U.S.C. Section 1317(d)].

This Finding is made on the basis of the following facts:

1. Section 307(d) of the Act [33 U.S.C. Section 1317(d)] prohibits any owner or operator of any source from introducing pollutants into publicly owned treatment works (POTWs) in violation of any effluent standard or prohibition or pretreatment standard promulgated under Section 307 of the Act.

2. Under Section 307(b) of the Act [33 U.S.C. 1317(b)], EPA promulgated the following general pretreatment regulations and categorical pretreatment standards:
 - a. The Federal categorical pretreatment standards for job-shop electroplating in 40 CFR 413 which require existing source job-shop metal finishing operations, that perform common metals plating and coating, and discharge over 10,000 gallons per day (gpd), to comply with the daily-maximum and four-day-average standards for cadmium, chromium, copper, lead, nickel, zinc, total cyanide and toxic organics in 40 CFR 413.14(c)(g) and 413.54(c)(g). The Federal job-shop electroplating standards were based on the performance of the best-available-technology treatment for metal finishing (metals hydroxide precipitation, settling, cyanide destruction through alkaline chlorination, and chromium reduction);
 - b. The national pretreatment requirements in 40 CFR 403.6(d) for all industrial dischargers into POTWs which prohibits any increase in the use of process water or any other attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with standards;
 - c. The national pretreatment standards in 40 CFR 403.12(e)(g) for all industrial dischargers into POTWs which require categorical industrial users to submit, at least twice per year, periodic reports of sampling that is representative of the discharge to the sewers and indicates both the concentration of the discharge for all Federally-regulated parameters and the flow rate of the discharge.
3. Custom Chrome and Bumper is a corporation and therefore a person within the meaning of Section 502(5) of the Act, [33 U.S.C. Section 1362(5)]. Custom Chrome and Bumper owns and operates a job-shop metal finishing shop at 335 Garden Highway in Yuba City, California. Custom Chrome and Bumper is a non-domestic source and introduces pollutants within the meaning of Section 502(6) of the Act [33 U.S.C. Section 1362(6)],

into the Yuba City domestic sewer system and wastewater treatment plant, which is a POTW within the meaning of Section 307(b) and the pretreatment regulations in 40 CFR 403.3(o). Custom Chrome and Bumper is therefore subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq., including Section 307, 33 U.S.C. Section 1317].

4. On August 5 and 20, 2003, EPA inspectors and a representative of Yuba City conducted a compliance sampling inspection of Custom Chrome and Bumper:

a. Facility Description: Custom Chrome and Bumper owns and operates a job-shop metal finishing business in one building in Yuba City:

1. The metal finishing operations comprise alkaline cleaning, alkaline etching, acid etching, deoxidation, derusting, zincate coating, red and black dyeing, plating (both electroless and electroplating) of copper, nickel, brass, cadmium, zinc, and chromium, and stripping of paint, nickel, aluminum, nickel and chromium;
2. Operations began in 1948 with the present configuration remaining relatively unchanged over the past 20 years;

b. Wastewater Discharges to the Sewer: Custom Chrome and Bumper discharges process-related wastewaters into the domestic sewers which feed into the Yuba City wastewater treatment plant for discharge into the Feather River:

1. The process-related wastewaters discharge through one sewer connection into the Yuba City sewers under Yuba City permit No. 01-5;
2. The process-related wastewaters are discharged from two continuously overflowing rinse tanks (designated in this Order and the February 26 EPA inspection report as Tanks 3 and 26) and from two solution tanks which when spent are mixed and drained together (designated in this Order and the February 26 EPA inspection report as Tanks 6 and 7);

3. The only wastewater treatment performed on-site is the in-tank pH neutralization of the spent solutions in Tanks 6 and 7. Otherwise, all process-related wastewaters discharge to the sewers without treatment to remove metals, or destroy cyanide, or in the case of the overflowing rinses from Tanks 3 and 26, without pH neutralization;
 4. The discharges of process-related wastewater to the sewers are monitored at a small sample box, located immediately outside of the plating shop building on the sidewalk, and designated in this Order and the February 26 EPA inspection report as IWD-FED1;
- c. Categorical Standards: The Federal categorical pretreatment standards in 40 CFR 413 for existing source job-shop electroplating operations discharging more than 10,000 gpd apply to all of the process-related wastewater discharges from Custom Chrome and Bumper:
1. Applicability: The Federal job-shop electroplating standards in 40 CFR 413.14(c)(g) and 413.54(c)(g) apply to job-shops metal finishers, like Custom Chrome and Bumper, that perform common metals plating and coating, that do not own more than 50% of the parts processed, that were in operation in their present configuration before 1983, and that discharge more than 10,000 gpd;
 2. Federally-Regulated Wastewaters: The Federal categorical pretreatment standards in 40 CFR 413.14(c)(g) and 413.54(c)(g) apply to all process-related wastewaters discharged to the sewers since they are all generated by the Federally-regulated operations of electroplating (copper, nickel, chromium, cadmium, zinc), chemical coating (zincate), chemical etching (nitric-acid etch, deoxidation, derusting), and their related operations of

alkaline cleaning, stripping and coloring;

3. Adjustments: The Federal categorical pretreatment standards in 40 CFR 413.14(c)(g) and 413.54(c)(g) applied at the compliance sample point designated as IWD-FED1 do not have to be adjusted to account for dilution or multiple Federal categories because all of the wastewaters discharging through this compliance sampling point qualify as Federally-regulated under 40 CFR 413;
4. Domestic Sewage: The domestic sewage from Custom Chrome and Bumper discharges into the Yuba City sewers downstream of the compliance sampling point.
5. Custom Chrome and Bumper violated Section 307(d) of the Act [33 U.S.C. Section 1317(d)] in that:
- a. The following Federal categorical pretreatment standards, and national prohibitions, apply to the discharges from Custom Chrome and Bumper at IWD-FED1:
- | Regulated Parameters
and Pollutant (mg/l) | Federal Standards
Daily-Max | 4-day-Ave | National Prohibitions
Inst-Max |
|--|--------------------------------|-----------|-----------------------------------|
| cadmium | 1.2 | 0.7 | - |
| chromium | 7.0 | 4.0 | - |
| copper | 4.5 | 2.7 | - |
| lead | 0.6 | 0.4 | - |
| nickel | 4.1 | 2.6 | - |
| zinc | 4.2 | 2.6 | - |
| cyanide-total | 1.9 | 1.0 | - |
| total toxic organics | - | 2.13 | - |
| pH-minimum | - | - | 5.0 s.u. |
| Compliance
Sampling Point | IWD-FED1 | | IWD-FED1 |
- b. EPA reviewed the Yuba City sample record for grabs and 24-hour composite

samples collected from Custom Chrome and Bumper at IWD-FED1, and also collected grab samples from the overflowing rinses in Tanks 3 and 26;

- c. Dilution as a Substitute for Treatment: Custom Chrome and Bumper failed to comply with the Federal prohibition against dilution of the Federally-regulated waste streams as a substitute for treatment, in that:
1. The overflowing final rinses in Tanks 3 and 26 continuously operate and discharge through IWD-FED1 whether or not parts are being processed;
 2. The overflowing final rinses from Tanks 3 and 26 and the mixed spents from Tanks 6 and 7 discharge through IWD-FED1 without best-available-technology treatment, or its equivalent, for the pollutants which are regulated by the Federal categorical pretreatment standards for job-shop electroplating in 40 CFR 413;
 3. As a result, the untreated metal finishing wastewaters are diluted by excess make-up water, which renders the samples collected from Custom Chrome and Bumper at IWD-FED1 unusable for the determination of compliance with the Federal categorical pretreatment standards;
- d. Representative Sampling: Custom Chrome and Bumper failed to collect samples that are representative of the sampling day=s operations over the reporting period, in that:
1. The samples collected at IWD-FED1 are diluted by excess make-up water from the continuous overflow rinses in Tanks 3 and 26, and
 2. The samples collected at IWD-FED1 do not account for the intermittent discharge of mixed spents from Tanks 6 and 7.
6. The February 26, 2004 EPA report of the inspection of Custom Chrome and Bumper is by reference made part of this Finding of Violation and Administrative Order.

ADMINISTRATIVE ORDER

Taking these Findings into consideration and considering the potential environmental and human health effects of the violations and all good faith efforts to comply, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to Section 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Act [33 U.S.C. Section 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)], IT IS HEREBY ORDERED that Custom Chrome and Bumper comply with the following requirements:

Cease Dilution as a Substitute for Treatment

1. By **MAY 28, 2004**, Custom Chrome and Bumper shall submit a response to each of the numbered Sections 2.0 through 5.2 of the inspection report.
2. By **JUNE 28, 2004**, Custom Chrome and Bumper shall submit a preliminary engineering plan of the steps to be taken in order to cease dilution as a substitute for treatment as required in 40 CFR 403.6(d). This preliminary engineering plan shall include:
 - a. A description of the rinsing practices currently used by Custom Chrome and Bumper. This description shall at least include standard operating procedures, tank sizes, flow rates, rinse water quality specifications, immersion times, processing schedules, drag-out controls, and any other information illustrative of the necessary amount of rinsing;
 - b. A detailed description of all plant, equipment, hardware, management plans and operating procedures to be used to cease dilution as a substitute for treatment through the retrofitting of on-demand rinsing practices and/or the installation and operation of best-available-technology treatment or its equivalent;
 - c. A schedule of all corrective actions to be made in order to cease dilution as a substitute for treatment, not to extend beyond the deadlines specified in Items 3

and 4 of this Order.

3. By **JULY 28, 2004**, Custom Chrome and Bumper shall complete the steps necessary to cease dilution as a substitute for treatment through the retrofitting of on-demand rinsing practices, and submit a notice of completion.
4. By **DECEMBER 28, 2004**, Custom Chrome and Bumper shall complete the necessary steps to cease dilution as a substitute for treatment through the installation and operation of best-available-technology treatment or its equivalent, and submit a notice of completion.

Self-Monitoring

5. Toxic Organic Management Plan: By **MAY 28, 2004**, Custom Chrome and Bumper shall prepare and submit a toxic organics management plan for the process-related wastewater discharges as set forth in 40 CFR 413.03(b). The toxic organic management plan shall specify the following:
 - a. All of the toxic organic compounds present on-site. This can be satisfied by MSDS sheets for each compound or solution present on-site that contains any of the toxic organic compounds listed in 40 CFR 413.02(i). The list of toxic organics is included as Appendix A of this Order;
 - b. The method of disposal and procedures used to ensure that each toxic organic present on-site can not spill or leak or otherwise reach the sewers.
6. Sampling Schedule: Custom Chrome and Bumper shall self-monitor for a year from June 1, 2004 through May 31, 2005, in accordance with the following schedule:
 - a. **ONCE EVERY MONTH**, Custom Chrome and Bumper shall self-monitor the wastewater discharges from the outside sample box at the designated compliance sampling point IWD-FED1 for cadmium, chromium, copper, lead, nickel, zinc,

total cyanide, total toxic organics, total dissolved solids, specific conductivity, and overall discharge flow rate;

- a. **ONCE EVERY SIX MONTHS, FOR EACH SPENT SOLUTION TANK DISCHARGED TO THE SEWERS, ON A DAY OF ITS DISCHARGE,**

Custom Chrome and Bumper shall:

- i. Self-monitor the spent solution tank contents immediately prior to discharging its contents to the sewers for cadmium, chromium, copper, lead, nickel, zinc, total cyanide, total toxic organics, total dissolved solids, specific conductivity, and discharge volume, and
- ii. Determine the overall discharge flow rate through IWD-1;

7. Measuring pH: Custom Chrome and Bumper shall self-monitor for a year from June 1, 2004 through May 31, 2005, in accordance with either in Item 7(a) below for the outside sample box or Item 7(b) below for individual tanks:

- a. **CONTINUOUSLY**, Custom Chrome and Bumper shall self-monitor for pH at the outside sample box using continuous pH meter; or
- b. Custom Chrome and Bumper shall instantaneously measure for pH in tank:
 - i. **HOURLY** from the overflowing rinses in Tanks 3 and 26, and
 - ii. **IMMEDIATELY PRIOR TO ANY AND EVERY DISCHARGE** from any other solution or rinse tank to the sewers.

8. Sampling and Analysis: Custom Chrome and Bumper shall self-monitor and analyze using the sampling protocols and EPA approved analytical methods (or equivalent) to achieve the listed detection limits indicated below:

Parameters and Pollutants	Sampling Method Protocols		Detection Limits
	@ Individual Tanks	@ Sample Box	
flow rate	tank volume	meter readings -	
cadmium	grab	24-hr composite	10 ug/l
chromium	grab	24-hr composite	10 ug/l
copper	grab	24-hr composite	10 ug/l
lead	grab	24-hr composite	10 ug/l
nickel	grab	24-hr composite	10 ug/l
zinc	grab	24-hr composite	10 ug/l
total cyanide	grab	grab	10 ug/l
total toxic organics	grab	grab	10 ug/l
pH	field grab	continuous	0.1 s.u.
total dissolved solids	grab	24-hr composite	5 mg/l
specific conductivity	grab	24-hr composite	-

9. Self-Certifications in Lieu of Toxic Organics Monitoring: The total toxic organics self-monitoring required by Items 6(a) and 6(b), above, may be replaced by self-certifications after approval, by EPA or the Regional Water Quality Control Board of the toxic organics management plans required in Item 5 of this Order. The first toxic organics samples are required to be collected before June 30, 2004.

Submissions

10. By the **TWENTY-EIGHTH (28th) DAY OF EACH MONTH**, Custom Chrome and Bumper shall submit all self-monitoring results for the previous month. The first monthly report is due on July 28, 2004 for the June 2004 self-monitoring. The 12th-and-last monthly report is due on June 28, 2005 for the May 2005 self-monitoring.
11. For each sample, Custom Chrome and Bumper shall record the sample results, the EPA analytical methods used, the date, time and location of sampling, the type of sample (ie. 24-hour composite, grab), the name of the laboratory used, and which subpart(s) of items 6 or 7 of this Order are fulfilled.

12. All reports submitted pursuant to this Order shall be signed by a principal executive officer of Custom Chrome and Bumper and shall include the following self-certifying statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

13. This Order is not and shall not be interpreted to be an NPDES permit under Section 402 of the Act [33 U.S.C. Section 1342], nor a Yuba City or RWQCB sewer discharge permit under 40 CFR 403.8(f)(iii), nor shall it in any way relieve Custom Chrome and Bumper of obligations imposed by the Act, or any other Federal, State or local law, including the City of Yuba City sewer use ordinances. The request for information included in this Order is not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because it is not an information collection request² within the meaning of 44 U.S.C. Sections 3502(4), 3502(11), 3507, 3512, and 3518. Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons [44 U.S.C. Sections 3502(4) and 3502 (11) and 5 CFR Section 1320.5(a)].

14. All submissions shall be mailed to the following addresses:

U.S. ENVIRONMENTAL PROTECTION AGENCY

75 Hawthorne Street
San Francisco, California 94105
Attn: Greg V. Arthur (WTR-7)

REGIONAL WATER QUALITY CONTROL BOARD

11020 Sun Center Drive, No. 200
Rancho Cordova, California 95670
Attn: Melissa Hall

CITY OF YUBA CITY

302 Burns Drive
Yuba City, California 95991
Attn: Mike Paulucci

15. This Order takes effect upon signature.

Original signed by: Alexis Strauss

Apr 20, 2004

Alexis Strauss
Director,
Water Division

Dated

Appendix A
TTOs from 40 CFR 413.02(i)

acenaphthene	bis(2-chloroethoxy)methane	phenanthrene
acrolein	methylene chloride	1,2,5,6-dibenzathracene(dibenzo
acrylonitrile	methyl chloride	(a,h)anthracene)
benzene	methyl bromide	indeno(1,2,3-cd)pyrene
benzidine	bromoform	(2,3-o-phenylene pyrene)
carbon tetrachloride	dichlorobromomethane	pyrene
chlorobenzene	chlorodibromomethane	tetrachloroethylene
1,2,4-trichlorobenzene	hexachlorobutadiene	toluene
hexachlorobenzene	hexachlorocyclopentadiene	trichloroethylene
1,2-dichloroethane	isophorone	vinyl chloride
1,1,1-trichloroethane	naphthalene	aldrin
hexachloroethane	nitrobenzene	dieldrin
1,1-dichloroethane	2-nitrophenol	chlordane (technical mixture and
1,1,2-trichloroethane	4-nitrophenol	metabolites)
1,1,2,2-tetrachloroethane	2,4-dinitrophenol	4,4-DDT
chloroethane	4,6-dinitro-o-cresol	4,4-DDE (p,p-DDX)
bis(2-chloroethyl)ether	n-nitrosodimethylamine	4,4-DDD (p,p-TDE)
2-chloroethyl vinyl ether	n-nitrosodiphenylamine	alpha-endosulfan
2-chloronaphthalene	n-nitrosodi-n-propylamine	beta-endosulfan
2,4,6-trichlorophenol	pentachlorophenol	endosulfan sulfate
parachlorometa cresol	phenol	endrin
chloroform	bis(2-ethylhexyl)phthalate	endrin aldehyde
2-chlorophenol	butyl benzyl phthalate	heptachlor
1,2-dichlorobenzene	di-n-butyl phthalate	heptachlor epoxide
1,3-dichlorobenzene	di-n-octyl phthalate	(BHC-hexachlorocyclohexane)
1,4-dichlorobenzene	diethyl phthalate	alpha-BHC
3,3-dichlorobenzidine	dimethyl phthalate	beta-BHC
1,1-dichloroethylene	1,2-benzathracene(benzo(a)	gamma-BHC
1,2-trans-dichloroethylene	hracene)	delta-BHC
2,4-dichlorophenol	benzo(a)pyrene(3,4-benzopyrene)	(PCB-polychlorinated biphenyls)
1,2-dichloropropane	3,4-benzofluoranthene(benzo(b)	PCB-1242 (arochlor 1242)
1,3-dichloropropylene	fluoranthene)	PCB-1254 (arochlor 1254)
2,4-dimethylphenol	11,12-	PCB-1221 (arochlor 1221)
2,4-dinitrotoluene	benzofluoranthene(benzo(k)	PCB-1232 (arochlor 1232)
2,6-dinitrotoluene	fluoranthene)	PCB-1248 (arochlor 1248)
1,2-diphenylhydrazine	chrysene	PCB-1260 (arochlor 1260)
ethylbenzene	acenaphthylene	PCB-1016 (arochlor 1016)
fluoranthene	anthracene	toxaphene
4-chlorophenyl phenyl ether	1,12-benzoperylene(benzo(ghi)	2,3,7,8-tetrachlorodibenzo-p-
4-bromophenyl phenyl ether	perylene)	dioxin (TCDD)
bis(2-chloroisopropyl)ether	fluorine	