

TRACKING REPORT:  
STATE WATER QUALITY CRITERIA  
FOR DIOXIN (2,3,7,8-TCDD)

U.S. Environmental Protection Agency  
Office of Water  
Office of Science and Technology  
Standards and Applied Science Division  
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## EXECUTIVE SUMMARY

- o Forty-two States and Territories have now adopted numeric criteria or translator procedures for 2,3,7,8-TCDD (dioxin) that are intended to protect human health (See Figure 1 and Table 1). These criteria span four orders of magnitude. EPA has approved thirty-nine of the forty-two State standards (see Table 4).
- o Two states have current proposals to adopt numeric human health criteria or translator procedures for dioxin (see Table 2).
- o An additional three states are expected to adopt numeric human health criteria or translator procedures for dioxin and one state is expected to adopt numeric aquatic life criteria for dioxin. These States have not yet issued formal proposals (see Table 3).
- o A total of forty-eight of the fifty-seven States and Territories have dioxin human health criteria or aquatic life criteria adopted, proposed, or expected.
- o Figure 1 illustrates that, since the passage of the Clean Water Act Amendments in February of 1987, the total number of States with adopted dioxin criteria has increased from three to forty-two. During calendar year 1991, a total of eleven States adopted dioxin criteria into their water quality standards. Three more States have adopted dioxin criteria so far in 1992.

DIOXIN (2,3,7,8 TCDD) TRACKING REPORT  
STATE DIOXIN CRITERIA SUMMARY

	ADOPTED	PROPOSED	EXPECTED
# STATES WITH CRITERIA:	38	2	5
# STATES WITH TRANSLATOR:	4	0	0
# STATES WITH CRITERIA OR TRANSLATOR:	42	2	5

STATES WITH CRITERIA OR TRANSLATOR ADOPTED:

CT ME MA NH NY DE MD  
PA VA AL GA MS NC SC  
TN IL IN MI MN OH WI  
AR LA OK TX IA MO NE  
MT ND SD CO UT WY AZ  
AS CA GU HI CM TT OR

STATES WITH CRITERIA OR TRANSLATOR PROPOSED:

WV KS\*

STATES WITH CRITERIA OR TRANSLATOR EXPECTED:

RI VT KS\* AK ID

STATES WITH NO ACTIONS:

NJ PR VI DC NM NV WA

\* KS has human health criteria formally proposed  
and aquatic life criteria expected.

# ADOPTION OF STATE DIOXIN CRITERIA OVER TIME

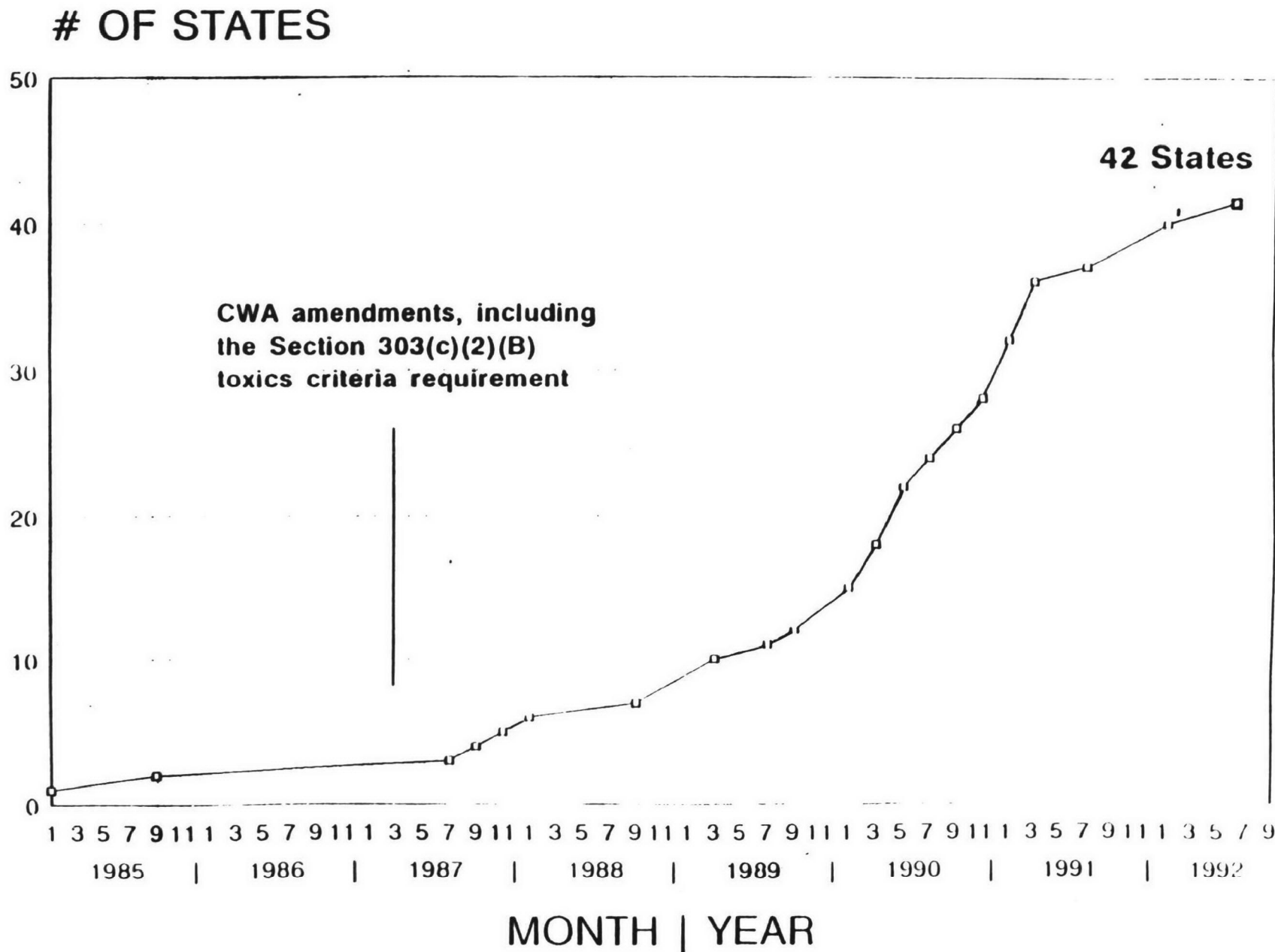


TABLE 1A  
ADOPTED DIOXIN HUMAN HEALTH CRITERIA (ALPHABETICALLY)

STATE	WATER + FISH ppg	FISH ONLY ppg	WATER ONLY ppg	DATE ADOPTED	EPA APPROVED?	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/dy
AL	1.2	1.2		02/20/91	YES	10-5	6.5	5,000	17,500
AR	1.0			11/07/91	YES	10-5	7.5	5,000	17,500
AS	0.013	0.014		09/07/90	YES	10-6	6.5	5,000	156,000
AZ		0.003	0.2	01/10/92	YES	10-6	6.5		
CA <sup>a</sup>	0.013 TEQ	0.014 TEQ		04/11/91	YES	10-6	6.5	5,000	156,000
CM	0.013	0.014		11/25/91	YES	10-6	6.5	5,000	156,000
CO	0.013		0.22	08/07/89	YES	10-6		5,000	156,000
CT	0.013	0.014		01/29/92	YES	10-6	6.5	5,000	156,000
DE <sup>b</sup>		0.0024		02/02/90	YES	10-6	37	5,000	156,000
GA		1.2		01/23/91	YES	10-5	6.5	5,000	17,500
GU	0.013	0.014		07/02/87	YES	10-6	6.5	5,000	156,000
HI		0.005		01/18/90	YES	10-6	19.9	5,000	156,000
IA		0.14		12/19/90	YES	10-5	6.5	5,000	156,000
IL <sup>cd</sup>				01/31/90	YES	10-6	20		
IN	0.1	0.1		01/31/90	YES	10-5	6.5	5,000	156,000
LA	0.71	0.72		10/20/91	YES	10-5	20	5,000	9,700
MA	0.013	0.014		07/23/90	YES	10-6	6.5	5,000	156,000
MD		1.2		04/06/90	YES	10-5	6.5	5,000	17,500
ME	0.013	0.014		02/01/89	YES	10-6	6.5	5,000	156,000
MI <sup>c</sup>				01/02/85	EXPECTED	10-5	6.5	51,000	156,000
MN	0.00051			07/24/90	YES	10-5	30	276,000	156,000
MO	0.013	0.014		12/12/87	YES	10-6	6.5	5,000	156,000
MS	1.0	1.0		03/28/91	YES	10-5	6.5	5,000	17,500

**TABLE 1A**  
**ADOPTED DIOXIN HUMAN HEALTH CRITERIA (ALPHABETICALLY)**

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	DATE ADOPTED	EPA APPROVED?	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/dy
MT	0.013	0.014		09/01/88	YES	10-6	6.5	5,000	156,000
NC	0.013	0.014		07/13/89	YES	10-6	6.5	5,000	156,000
ND	0.013	0.014		02/01/91	YES	10-6	6.5	5,000	156,000
NE	0.13	0.14		02/16/90	YES	10-5	6.5	5,000	156,000
NH		1		08/08/90	EXPECTED	10-5	6.5	5,000	17,500
NY		1		09/01/85	YES			10,000	
OH	0.13	0.14		02/01/90	YES	10-5	6.5	5,000	156,000
OK	0.13	0.14		05/26/92	EXPECTED	10-5	6.5	5,000	156,000
OR	0.013	0.014		08/28/87	YES	10-6	6.5	5,000	156,000
PA	0.01			03/25/89	YES	10-6	6.5	5,000	156,000
SC		1.2		03/13/91	YES	10-5	6.5	5,000	17,500
SD	0.013	0.014		10/01/87	YES	10-6	6.5	5,000	156,000
TN		1.0 TEQ		01/17/91	YES	10-5	6.5	5,000	17,500
TT	0.013	0.014		11/07/90	YES	10-6	6.5	5,000	156,000
TX	1.0 TEQ	0.7 TEQ		06/12/91	YES	10-5	10/15	5,000	13,900
UT	0.013	0.014		01/18/91	YES	10-6	6.5	5,000	156,000
VA	1.2			05/14/90	YES	10-5	6.5	5,000	17,500
WI	0.03			03/01/89	YES	10-5	20	5,000	156,000
WY	0.013			10/03/90	YES	10-6	6.5	5,000	156,000

<sup>a</sup> The criteria listed are for freshwaters, inland bays, and estuaries. California has adopted a criterion of 0.0039 ppq for ocean waters.

<sup>b</sup> Criteria adopted vary by use, value displayed is the State's most stringent.

<sup>c</sup> The State has adopted a translator procedure.

<sup>d</sup> Illinois has not yet applied their translator, so the BCF and cancer slope are not known.

TA 1B  
ADOPTED DIOXIN HUMAN HEALTH CRITERIA (CHRONOLOGICALLY)

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	DATE ADOPTED	EPA APPROVED ?	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/day
MI <sup>c</sup>				01/02/85	EXPECTED	10-5	6.5	51,000	156,000
NY		1		09/01/85	YES			10,000	
GU	0.013	0.014		07/02/87	YES	10-6	6.5	5,000	156,000
OR	0.013	0.014		08/28/87	YES	10-6	6.5	5,000	156,000
SD	0.013	0.014		10/01/87	YES	10-6	6.5	5,000	156,000
MO	0.013	0.014		12/12/87	YES	10-6	6.5	5,000	156,000
MT	0.013	0.014		09/01/88	YES	10-6	6.5	5,000	156,000
ME	0.013	0.014		02/01/89	YES	10-6	6.5	5,000	156,000
WI	0.03			03/01/89	YES	10-5	20	5,000	156,000
PA	0.01			03/25/89	YES	10-6	6.5	5,000	156,000
NC	0.013	0.014		07/13/89	YES	10-6	6.5	5,000	156,000
CO	0.013		0.22	08/07/89	YES	10-6		5,000	156,000
HI		0.005		01/18/90	YES	10-6	19.9	5,000	156,000
IN	0.1	0.1		01/31/90	YES	10-5	6.5	5,000	156,000
IL <sup>cd</sup>				01/31/90	YES	10-6	20		
OH	0.13	0.14		02/01/90	YES	10-5	6.5	5,000	156,000
DE <sup>b</sup>		0.0024		02/02/90	YES	10-6	37	5,000	156,000
NE	0.13	0.14		02/16/90	YES	10-5	6.5	5,000	156,000
CA <sup>a</sup>	0.013 TEQ	0.014 TEQ		05/11/90	YES	10-6	6.5	5,000	156,000
MD		1.2		04/06/90	YES	10-5	6.5	5,000	17,500
VA	1.2			05/14/90	YES	10-5	6.5	5,000	17,500
MA	0.013	0.014		07/23/90	YES	10-6	6.5	5,000	156,000

**TABLE 1B**  
**ADOPTED DIOXIN HUMAN HEALTH CRITERIA (CHRONOLOGICALLY)**

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	DATE ADOPTED	EPA APPROVED ?	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/day
MN	0.00051			07/24/90	YES	10-5	30	276,000	156,000
NH		1		08/08/90	EXPECTED	10-5	6.5	5,000	17,500
AS	0.013	0.014		09/07/90	YES	10-6	6.5	5,000	156,000
WY	0.013			10/03/90	YES	10-6	6.5	5,000	156,000
TT	0.013	0.014		11/07/90	YES	10-6	6.5	5,000	156,000
IA		0.14		12/19/90	YES	10-5	6.5	5,000	156,000
TN		1.0 TEQ		01/17/91	YES	10-5	6.5	5,000	17,500
UT	0.013	0.014		01/18/91	YES	10-6	6.5	5,000	156,000
GA		1.2		01/23/91	YES	10-5	6.5	5,000	17,500
ND	0.013	0.014		02/01/91	YES	10-6	6.5	5,000	156,000
AL	1.2	1.2		02/20/91	YES	10-5	6.5	5,000	17,500
SC		1.2		03/13/91	YES	10-5	6.5	5,000	17,500
MS	1.0	1.0		03/28/91	YES	10-5	6.5	5,000	17,500
TX	1.0 TEQ	0.7 TEQ		06/12/91	YES	10-5	10/15	5,000	13,900
LA	0.71	0.72		10/20/91	YES	10-5	20	5,000	9,700
AR	1.0			11/07/91	YES	10-5	7.5	5,000	17,500
CM	0.013	0.014		11/25/91	YES	10-6	6.5	5,000	156,000
AZ		0.003	0.2	01/10/92	YES	10-6	6.5		
CT	0.013	0.014		01/29/92	YES	10-6	6.5	5,000	156,000
OK	0.13	0.14		05/26/92	EXPECTED	10-5	6.5	5,000	156,000

<sup>a</sup> The criteria listed are for freshwaters, inland bays, and estuaries. California has adopted a criterion of 0.0039 ppq for ocean waters.

<sup>b</sup> Criteria adopted vary by use, value displayed is the State's most stringent.

<sup>c</sup> The State has adopted a translator procedure.

<sup>d</sup> Illinois has not yet applied their translator, so the BCF and cancer slope are not n.



TABLE 2  
PROPOSED DIOXIN HUMAN HEALTH CRITERIA

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	DATE PROPOSED	SCHEDULED ADOPTION ?	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/day
KS		0.014		01/08/91	10/01/92	10-6	6.5	5,000	156,000
WV	0.013	0.014		05/17/91	05/01/92	10-6	6.5	5,000	156,000

**TABLE 3**  
**EXPECTED DIOXIN HUMAN HEALTH CRITERIA**

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	SCHEDULED PROPOSAL	SCHEDULED ADOPTION	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/day
ID	0.013	0.014				10 <sup>-6</sup>	6.5	5,000	156,000
RI	0.013	0.014				10 <sup>-6</sup>	6.5	5,000	156,000
VT	0.013	0.014				10 <sup>-6</sup>	6.5	5,000	156,000

T. 4  
ADOPTED DIOXIN HUMAN HEALTH CRITERIA  
APPROVED BY EPA  
(CHRONOLOGICALLY)

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/dy	DATE ADOPTED	DATE APPROVED
GU	0.013	0.014		10-6	6.5	5,000	156,000	07/02/87	04/06/87
OR	0.013	0.014		10-6	6.5	5,000	156,000	08/28/87	09/30/87
IL <sup>cd</sup>				10-6	20			01/31/90	03/09/90
NC	0.013	0.014		10-6	6.5	5,000	156,000	07/13/89	02/06/90
PA	0.01			10-6	6.5	5,000	156,000	03/25/89	04/11/90
IN	0.1	0.1		10-5	6.5	5,000	156,000	01/31/90	05/07/90
OH	0.13	0.14		10-5	6.5	5,000	156,000	02/01/90	04/25/90
HI		0.005		10-6	19.9	5,000	156,000	01/18/90	05/09/90
WI	0.03			10-5	20	5,000	156,000	03/01/89	05/15/90
CA <sup>a</sup>	0.013 TEQ	0.014 TEQ		10-6	6.5	5,000	156,000	05/11/90	06/28/90
DE <sup>b</sup>		0.0024		10-6	37	5,000	156,000	02/02/90	08/24/90
NY		1				10,000		09/01/85	09/07/90
MD		1.2		10-5	6.5	5,000	17,500	04/06/90	09/12/90
ME	0.013	0.014		10-6	6.5	5,000	156,000	02/01/89	09/20/90
AS	0.013	0.014		10-6	6.5	5,000	156,000	09/07/90	09/27/90
MA	0.013	0.014		10-6	6.5	5,000	156,000	07/23/90	12/20/90
TT	0.013	0.014		10-6	6.5	5,000	156,000	11/07/90	01/11/91
VA	1.2			10-5	6.5	5,000	17,500	05/14/90	02/25/91
MT	0.013	0.014		10-6	6.5	5,000	156,000	09/01/88	03/08/91
ND	0.013	0.014		10-6	6.5	5,000	156,000	02/01/91	03/08/91
UT	0.013	0.014		10-6	6.5	5,000	156,000	01/18/91	03/08/91
WY	0.013			10-6	6.5	5,000	156,000	10/03/90	03/08/91

TABLE 4  
ADOPTED DIOXIN HUMAN HEALTH CRITERIA  
APPROVED BY EPA  
(CHRONOLOGICALLY)

STATE	WATER + FISH ppq	FISH ONLY ppq	WATER ONLY ppq	RISK LEVEL	FISH CONS RATE g/day	BCF	CANCER SLOPE mg/kg/dy	DATE ADOPTED	DATE APPROVED
SD	0.013	0.014		10-6	6.5	5,000	156,000	10/01/87	03/13/91
GA		1.2		10-5	6.5	5,000	17,500	01/23/91	06/03/91
IA		0.14		10-5	6.5	5,000	156,000	12/19/90	06/11/91
MO	0.013	0.014		10-6	6.5	5,000	156,000	12/12/87	06/11/91
SC		1.2		10-5	6.5	5,000	17,500	03/13/91	07/09/91
MN	0.00051			10-5	30	276,000	156,000	07/24/90	07/16/91
AL	1.2	1.2		10-5	6.5	5,000	17,500	02/20/91	07/18/91
MS	1.0	1.0		10-5	6.5	5,000	17,500	03/28/91	07/24/91
NE	0.13	0.14		10-5	6.5	5,000	156,000	02/16/90	08/02/91
CO	0.013		0.22	10-6		5,000	156,000	08/07/89	08/20/91
TX	1.0 TEQ	0.7 TEQ		10-5	10/15	5,000	13,900	06/12/91	09/24/91
TN		1.0 TEQ		10-5	6.5	5,000	17,500	01/17/91	09/28/91
CM	0.013	0.014		10-6	6.5	5,000	156,000	11/25/91	01/13/92
AR	1.0			10-5	7.5	5,000	17,500	11/07/91	01/24/92
LA	0.71	0.72		10-5	20	5,000	9,700	11/25/91	01/24/92
AZ		0.003	0.2	10-6	6.5			01/10/92	03/02/92
CT	0.013	0.014		10-6	6.5	5,000	156,000	01/29/92	05/15/92

<sup>a</sup> The criteria listed are for freshwaters, inland bays, and estuaries. California has adopted a criterion of 0.0039 ppq for ocean waters.

<sup>b</sup> Criteria adopted vary by use, value displayed is the State's most stringent.

<sup>c</sup> The state has adopted a translator procedure.

<sup>d</sup> Minnesota has not yet applied their translator, so the BCF and cancer slope are not known.

DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

PAGE

STATE AK  
EPA REGION 10

STATUS SUMMARY NUMERIC CRITERIA EXPECTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			0.01 ug/l
FRESH AQUATIC LIFE (Chronic)			0.00001 ug/l
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Alaska adopted all Federal criteria by reference. The State Attorney General has questioned the adoption by reference.

STATE: AL  
EPA REGION: 04

STATUS SUMMARY NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	1.2 ppq		
HUMAN HEALTH (Fish Only):	1.2 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	02/20/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The adopted criteria are based on the FDA cancer potency factor. The State will use the mean annual flow as the instream design flow in writing permits. EPA approved the criteria on 7/18/91.

DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

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STATE AR  
EPA REGION: 06

STATUS SUMMARY. NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	1 0 ppq		
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g day)	7 5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	11/07/91		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

EPA approved the criterion on 1/24/92.

STATE: AS  
EPA REGION: 09

STATUS SUMMARY. NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	09/07/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

American Samoa adopted WQS which incorporate EPA dioxin criteria by reference. The State selected a risk level of 10-6. A public hearing was held on April 11, 1990. EPA approved the criteria on 9/27/90.

DIOXIN TRACKING REPORT 1  
STATE DIOXIN CRITERIA FACT SHEET

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STATE AZ  
EPA REGION: 09

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):	10,000 ppq		
FRESH AQUATIC LIFE (Chronic):	5,000 ppq		
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only)	0.003 ppq		
HUMAN HEALTH (Water Only):	0.2 ppq		
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	01/10/92		/
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/	/

COMMENT

Arizona received Attorney General approval on February 18, 1992. EPA approved the criterion on 3/2/92.

STATE: CA  
EPA REGION: 09

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	04/11/91	/	/
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/	/

COMMENT

The criteria listed above are for fresh waters, inland bays, and estuaries. Criteria for freshwaters (water and fish consumption), bay and estuaries (fish consumption only) were adopted by the SWRCB on 4/11/91 and certified by their Chief Counsel on 5/11/91. The State has also adopted a criterion for ocean waters of 0.0039 ppq based on a risk level of 10-6, a fish consumption rate of 23 g/day, a cancer potency slope of 156,000, and a bioconcentration factor of 5,000. These criteria were adopted on 5/11/90. The State uses the TEQ approach for both freshwaters and ocean waters. EPA approved the freshwaters criteria on 11/6/91 and the ocean waters criterion on 6/28/90.

DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

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STATE CM  
EPA REGION: 09

STATUS SUMMARY NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	11/25/91		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			/

COMMENT

The Northern Marianas Islands adopted EPA human health criteria based on water and fish consumption for fresh waters and fish consumption only for marine waters. EPA approved the criteria on 1/13/92.

STATE CO  
EPA REGION: 08

STATUS SUMMARY NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):	0.01 ug/l		
FRESH AQUATIC LIFE (Chronic):	0.00001 ug/l		
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):	0.22 ppq		
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	08/07/89	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Colorado adopted published LOELs for aquatic life protection and a human health criterion based solely on consumption of water. The human health criterion for drinking water supplies was derived using EPA Section 304(a) methods and current IRIS information. The water and fish criterion of 0.013 ppq only applies to certain basins. The water only criterion of 0.22 ppq was adopted in Colorado's basic standards and applies State-wide. EPA approved the criteria on 8/20/91.



DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

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STATE CT  
EPA REGION: 01

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.013 ppq		
HUMAN HEALTH (Fish Only)	0.014 ppq		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156.000		
BIOCONCENTRATION FACTOR	5.000		
ADOPTION DATE (ACTUAL/PLANNED)	01/29/92		/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Connecticut achieved compliance with CWA Section 303(c)(2)(B) on January 29, 1992 using an option 1 approach of adopting all EPA criteria guidance by reference. EPA approved the criteria on 5/15/92.

STATE DC  
EPA REGION: 03

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

No criterion planned.

DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

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STATE DE  
EPA REGION- 03

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only):	0.0024 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	37		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	02/02/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The criterion listed above is for marine/estuarine waters. The State has also adopted a criterion for fresh waters of 0.016 ppq based on consumption of fish and water and 0.017 ppq for fish consumption only. The assumed fish consumption rate for fresh waters is 5.2 g/day. The median flow is used as the design flow for writing permit limits for human health criteria. EPA approved the criterion on 8/24/90.

STATE: FL  
EPA REGION: 04

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

On February 25, 1992, EPA disapproved the absence of dioxin criteria. The State Environmental Regulatory Commission voted on March 27, 1992, not to adopt the dioxin criteria and allow EPA to promulgate standards for dioxin

DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

PAGE

STATE: GA  
EPA REGION: 04

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):	1 2 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6 5		
CANCER POTENCY SLOPE	17.500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	01/23/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

The State will apply the dioxin criterion at the long term average flow.  
EPA approved the criterion on 6/03/91.

STATE: GU  
EPA REGION: 09

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6 5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	07/02/87	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Guam adopted human health criteria based on water and fish consumption using EPA methods and assumptions on September 2, 1987. EPA approved the criteria on 9/30/87.

STATE HI  
EPA REGION: 09

STATUS SUMMARY NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):	0.003 ug/l		
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):	0.005 ppq		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	19.9		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	01/18/90		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Hawaii adopted aquatic life criteria based on EPA-published LOELs and human health criteria based on fish consumption using EPA methods at a fish consumption rate of 19.9 g/day. EPA approved the criteria on 5/9/90.

STATE: IA  
EPA REGION: 07

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):	0.14 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	12/19/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The State proposes to use the 7Q10 flow as the instream design flow for writing permit limits. The state based their calculations on EPA's assumptions. EPA approved the criterion on 6/11/91.

STATE ID  
EPA REGION 10

STATUS SUMMARY: NUMERIC CRITERIA EXPECTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			0.013 ppq
HUMAN HEALTH (Fish Only)			0.014 ppq
HUMAN HEALTH (Water Only)			
RISK LEVEL			10 <sup>-6</sup>
FISH CONSUMPTION RATE (g/day)			6.5
CANCER POTENCY SLOPE			156,000
BIOCONCENTRATION FACTOR			5,000
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Idaho is expected to adopt a dioxin criterion for the Clearwater/Snake Rivers. The criterion is expected to be based on EPA Section 304(a) methods and a risk level of 10<sup>-6</sup>. Dioxin was associated with CWA Section 304(1) waters listed for the State.

STATE: IL  
EPA REGION: 05

STATUS SUMMARY: TRANSLATOR ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL	10 <sup>-6</sup>		
FISH CONSUMPTION RATE (g/day)	20		
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	01/31/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Illinois adopted a translator for derivation of human health criteria for drinking water, recreational, and consumption of fish exposure routes on 1/31/90. The 10<sup>-6</sup> risk level applies to individual carcinogens, but the rules provide for additive total risk for a given discharge of all carcinogens present up to 10<sup>-5</sup>. The State uses the harmonic mean flow as the design flow. EPA approved the translator on 2/6/90.

STATE: IN  
EPA REGION 05

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.1 ppq		
HUMAN HEALTH (Fish Only):	0.1 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	01/31/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Indiana adopted human health criteria based on water and fish consumption (and fish consumption only) using EPA methods and a risk level of 10-5 on January 31, 1990. The State uses 1/4 of the 50th percentile flow in writing permit limits for human health criteria. EPA approved the criteria on 5/7/90.

STATE: KS  
EPA REGION: 07

STATUS SUMMARY: NUMERIC CRITERIA PROPOSED  
NUMERIC CRITERIA EXPECTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			0.01 ug/l
FRESH AQUATIC LIFE (Chronic):			0.00001 ug/l
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):		0.014 ppq	
HUMAN HEALTH (Water Only):			
RISK LEVEL		10-6	
FISH CONSUMPTION RATE (g/day)		6.5	
CANCER POTENCY SLOPE		156,000	
BIOCONCENTRATION FACTOR		5,000	
ADOPTION DATE (ACTUAL/PLANNED)	/ /	10/01/92	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		01/08/91	/ /

COMMENT

Kansas submitted draft WQS to EPA on January 22, 1990. The criteria were based on EPA's Section 304(a) guidance at a 10-6 risk level for carcinogens. Kansas is expected to start a formal adoption process in October, 1992. The State uses the 7Q10 flow as the design flow for writing permit limits.

STATE NY  
EPA REGION 04

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED, PROPOSED, EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)			
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Kentucky adopted a proposal on January 27, 1992, to rescind the earlier adoption of EPA recommended criteria for dioxin. On May 26, 1992, the Region disapproved of the deletion of dioxin standards for the state of Kentucky.

STATE LA  
EPA REGION: 06

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.71 ppq		
HUMAN HEALTH (Fish Only):	0.72 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	20		
CANCER POTENCY SLOPE	3.700		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	10/20/91		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

EPA approved the criteria on 12-92

STATE MA  
EPA REGION: 01

STATUS SUMMARY NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.013 ppq		
HUMAN HEALTH (Fish Only)	0.014 ppq		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	5.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	07/23/90		
EPA APPROVED?	ES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Massachusetts has recently adopted revised criteria using an option 1 approach of adopting all EPA criteria guidance by reference. The State will use EPA guidance and assumptions initially, but is evaluating whether a risk level more stringent than 10-6 is needed based on concerns about human exposure from multiple sources/media. EPA approved the criteria on 12/20/90.

STATE: MD  
EPA REGION: 03

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):	0.2 ppq		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	5.5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	04/06/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Maryland used the FDA cancer potency slope (17,500), therefore the criterion equates to an EPA risk level of 10-4. The mean flow is used as the design flow for writing permit limits for human health criteria. EPA approved the criterion on 9/12/90.



STATE ME  
EPA REGION 01

STATUS SUMMARY NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.013 ppq		
HUMAN HEALTH (Fish Only)	0.014 ppq		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	51,000		
ADOPTION DATE (ACTUAL/PLANNED)	12/01/99		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Maine adopted EPA human health criteria based on water and fish consumption. Maine is considering a revision to the risk level. But EPA, Region I indicates that the risk level shown above is what has been used in practice with Maine's WQS. The 7Q10 flow is used as the design flow for permits. EPA approved the criteria on 9/20/90.

STATE: MI  
EPA REGION: 05

STATUS SUMMARY TRANSLATOR ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	51,000		
ADOPTION DATE (ACTUAL/PLANNED)	01/02/85		
EPA APPROVED?	NO	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Michigan adopted a translator. The State used a BCF of 51,000. Although the State selected a risk level of 10-5, the higher BCF resulted in a derived criterion equivalent to EPA guidance at 10-6. The State uses a design flow equal to 1/4 the 95% exceedance flow (close to the 7Q10). EPA is expected to approve the translator.

DIOXIN TRACKING REPORT 1  
STATE OF MINN. CRITERIA CHECK SHEET

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STATE MN  
EPA REGION 05

STATUS SUMMARY TRANSLATOR ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.00051 ppq		
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	20		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	276,000		
ADOPTION DATE (ACTUAL/PLANNED)	07/24/90		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Minnesota adopted a translator. As such, the dioxin criterion above is not formally adopted, but instead was derived using the translator. The example above was derived for a discharge to salmonid waters. The State uses a BCF of 5,000 for salmonid waters, and a BCF of 69,000 for other waters (except where a site-specific BCF is available). The example equates to EPA guidance at  $4.7 \times 10^{-8}$  risk. Design flow = harmonic mean. EPA approved the translator procedure on 7/16/91.

STATE: MO  
EPA REGION: 07

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	12/12/87	/	
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/	

COMMENT

Missouri adopted a human health criterion based on water and fish consumption using EPA Section 304(a) methods on December 12, 1989. The criteria apply to all class I (aquatic life) and class II (water supply) reaches. The State uses the 7Q10 flow as the design flow. EPA approved the criteria on 6/11/91.

STATE MS  
EPA REGION 04

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	1 0 ppq		
HUMAN HEALTH (Fish Only)	1 0 ppq		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	5 5		
CANCER POTENCY SLOPE	17.500		
BIOCONCENTRATION FACTOR	5.000		
ADOPTION DATE (ACTUAL/PLANNED)	03.28 91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The State will apply the criterion at the mean annual flow. The State selected a risk level slightly more protective than a risk level of 10-5 EPA approved the criteria on 7/24/91.

STATE MT  
EPA REGION 08

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	3 013 ppq		
HUMAN HEALTH (Fish Only):	3.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156.000		
BIOCONCENTRATION FACTOR	5.000		
ADOPTION DATE (ACTUAL/PLANNED)	09/01/88	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Montana adopted EPA's criteria guidance by reference to the Gold Book. EPA approved the criteria on 3/8 91

STATE NC  
EPA REGION 04

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish)	0 013 ppq		
HUMAN HEALTH (Fish Only):	0 014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	07/13/89	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

North Carolina has adopted two human health criteria: a "fish only" criterion applicable to all State waters, and a "water and fish" criterion applicable to water supply reaches only. The State used EPA Section 304(a) methods and consumption rate assumptions. The State uses the mean annual flow as the design flow. EPA approved the criteria on 4/11/90.

STATE: ND  
EPA REGION: 08

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0 013 ppq		
HUMAN HEALTH (Fish Only):	0 014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	02/01/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT.

EPA approved the criteria on 3/8/91

STATE: NE  
EPA REGION 07

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):	0.01 ug/l		
FRESH AQUATIC LIFE (Chronic):	0.0001 ug/l		
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.13 ppq		
HUMAN HEALTH (Fish Only):	0.14 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	5.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	02/16/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/	/

COMMENT

Nebraska adopted EPA published LOELs for freshwater aquatic life, with EPA approving in October, 1988. The human health criteria are based on EPA guidance at 10-5 risk. The State Environmental Control Commission adopted the human health criteria on February 16, 1990. The State uses the 7Q10 flow as the design flow. EPA approved the criteria on 8/2/91.

STATE: NH  
EPA REGION: 01

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):	1 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	5.5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	08/08/90	/ /	/ /
EPA APPROVED?	NO	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

For all other toxic pollutants, the State adopted EPA criteria guidance at a 10-6 risk level. New Hampshire has listed Section 304(1) waters based on dioxin problems. Although EPA is expected to approve this criterion, it has not been approved.

STATE NJ  
EPA REGION 02

STATUS SUMMARY. NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only)			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	N/A	N/A
EPA APPROVED?			
PROPOSAL DATE (ACTUAL/PLANNED)			/ /

COMMENT

STATE. NM  
EPA REGION. 06

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			/

COMMENT

STATE NY  
EPA REGION 09

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

STATE: NY  
EPA REGION: 02

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):	1 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR	10,000		
ADOPTION DATE (ACTUAL/PLANNED)	09/01/85	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

New York adopted a criterion based on a 1981 State Department of Health (NYSDOH) recommended maximum level of 10 ppt in fish flesh, and a BAF of 10,000. This maximum level was based on detectability. Information on other exposure assumptions are not available at this time. This criterion equates to EPA's guidance at a risk level of 1 in 10,000. The 30Q10 flow is used as the design flow. EPA approved the criterion on 9/07/90.

STATE: OH  
EPA REGION: 05

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.13 ppq		
HUMAN HEALTH (Fish Only):	0.14 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	5.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	02/01/90		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Ohio criteria are based on water and fish consumption. The fish consumption criteria apply to all aquatic life reaches while the water and fish consumption criteria apply to water supply reaches only. The State used EPA section 304(a) methods. The State uses the harmonic mean flow in writing permits limits for human health criteria. EPA approved the criteria on 4/25/90.

STATE: OK  
EPA REGION: 06

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.13 ppq		
HUMAN HEALTH (Fish Only):	0.14 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10- 5		
FISH CONSUMPTION RATE (g/day)	5.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	05/26/92		
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT



STATE: OR  
EPA REGION: 10

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)	0.01 ug/l		
FRESH AQUATIC LIFE (Chronic)	0.00001 ug/l		
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	09/28/87	/ /	/
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/

COMMENT

Oregon adopted EPA human health criteria and EPA published LOELs for aquatic life on August 28, 1987. EPA approved the criteria on 3/9/88.

STATE: PA  
EPA REGION: 03

STATUS SUMMARY: TRANSLATOR ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.01 ppq		
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	03/25/89	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Pennsylvania adopted a translator procedure for human health criteria. A criterion was derived for dioxin which applies statewide. The State uses the harmonic mean flow in writing permits for human health criteria. EPA approved the translator on 4/11/90.

STATE PR  
EPA REGION 02

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

STATE: RI  
EPA REGION: 01

STATUS SUMMARY: NUMERIC CRITERIA EXPECTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			0.013 ppq
HUMAN HEALTH (Fish Only):			0.014 ppq
HUMAN HEALTH (Water Only):			
RISK LEVEL			10-6
FISH CONSUMPTION RATE (g/day)			6.5
CANCER POTENCY SLOPE			156,000
BIOCONCENTRATION FACTOR			5,000
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT -

Rhode Island is expected to achieve compliance with CWA Section 303(c)(2)(B) using an option 1 approach of adopting all EPA criteria guidance. The State will adopt EPA's recommendation for dioxin.

DICKIN TRACKING REPORT 2  
STATE DICKIN CRITERIA FACT SHEET

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STATE SC  
EPA REGION: 04

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish)	1 2 ppq		
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	03/13/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The State will apply the criterion at the average annual flow. EPA approved the criterion on 7/9/91

STATE: SD  
EPA REGION: 08

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	10/01/87	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

South Dakota adopted all EPA criteria by reference to the Gold Book. EPA approved the criteria on 3/13/91.

STATE: TN  
EPA REGION: 04

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)			
HUMAN HEALTH (Fish Only)	1.0 ppq (TEQ)		
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	01/17/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Other assumptions made by the State: (1) TCDD is a cancer promoter only, and (2) TCDD has a threshold value for cancer (carcinogenicity). The State uses the 30Q2 flow as the instream design flow for applying the criterion. The criterion is based on the total toxicity equivalent (TEQ) measure of all chloro-dibenzo dioxins and furans. EPA approved the criterion on 9/28/91.

STATE: TT  
EPA REGION: 09

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	11/07/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The Trust Territories (Palau) adopted EPA human health criteria based on water and fish consumption for fresh waters and fish consumption only for marine waters. EPA approved the criteria on 11/1/91.

DIOXIN TRACKING REPORT C  
STATE DIOXIN CRITERIA FACT SHEET

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STATE: TX  
EPA REGION: 06

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	1.0 ppq (TEQ)		
HUMAN HEALTH (Fish Only)	0.7 ppq (TEQ)		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	10/15		
CANCER POTENCY SLOPE	13,900		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	06/12/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The State assumes fish consumption at 10 g/day for fresh waters (1.0 ppq) and 15 g/day for marine waters (0.7 ppq). EPA approved the criteria on 9/24/91.

STATE: UT  
EPA REGION: 08

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):	0.013 ppq		
HUMAN HEALTH (Fish Only):	0.014 ppq		
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	01/18/91	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Utah achieved compliance with CWA Section 303(c)(2)(B) during FY 1990 using an option 1 approach of adopting all EPA criteria guidance. EPA approved the criteria on 3/8/91.

STATE: VA  
EPA REGION 03

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish): 1 2 ppq			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	5 5		
CANCER POTENCY SLOPE	17,500		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	05/14/90	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Virginia used the FDA cancer potency slope (17,500), therefore the criterion equates to an EPA risk level of 10-4. The State uses the mean flow in writing permit limits for human health criteria. EPA approved the criterion on 2/25/91.

STATE: VI  
EPA REGION: 02

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

DIOXIN TRACKING REPORT 2  
STATE DIOXIN CRITERIA FACT SHEET

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STATE VT  
EPA REGION 01

STATUS SUMMARY: NUMERIC CRITERIA EXPECTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish):			0.013 ppq
HUMAN HEALTH (Fish Only):			0.014 ppq
HUMAN HEALTH (Water Only):			
RISK LEVEL			10-6
FISH CONSUMPTION RATE (g/day)			6.5
CANCER POTENCY SLOPE			156,000
BIOCONCENTRATION FACTOR			5,000
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Vermont is expected to achieve compliance with CWA Section 303(c)(2)(B) using an option 1 approach of adopting all EPA criteria guidance by reference. The current draft standards, however, provide that the criteria would not become effective until 1995.

STATE: WA  
EPA REGION: 10

STATUS SUMMARY: NEITHER NUMERIC CRITERIA NOR A TRANSLATOR PROCEDURE  
ARE ADOPTED/PROPOSED/EXPECTED AT PRESENT

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):			
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL			
FISH CONSUMPTION RATE (g/day)			
CANCER POTENCY SLOPE			
BIOCONCENTRATION FACTOR			
ADOPTION DATE (ACTUAL/PLANNED)	/ /	/ /	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

Dioxin was associated with CWA Section 304(1) waters listed for the State

STATE WI  
EPA REGION 05

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish):	0.03 ppq		
HUMAN HEALTH (Fish Only):			
HUMAN HEALTH (Water Only):			
RISK LEVEL	10-5		
FISH CONSUMPTION RATE (g/day)	20		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	03/01/89	/ /	/ /
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		/ /	/ /

COMMENT

The State has adopted an array of dioxin criteria (EPA approved) based on consumption of water and fish (in ppq):

PWS Reaches			Non-PWS Reaches		
WW Fish	CW Fish	Great Lakes	WW Fish	CW Fish	Other Fish
0.097	0.03	0.03	0.1	0.03	450

EPA approved the criterion on 5/15/90.

STATE: WV  
EPA REGION: 03

STATUS SUMMARY: NUMERIC CRITERIA PROPOSED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute):			
FRESH AQUATIC LIFE (Chronic):			
MARINE AQUATIC LIFE (Acute):			
MARINE AQUATIC LIFE (Chronic):			
HUMAN HEALTH (Water and Fish):		0.013 ppq	
HUMAN HEALTH (Fish Only):		0.014 ppq	
HUMAN HEALTH (Water Only):			
RISK LEVEL		10-6	
FISH CONSUMPTION RATE (g/day)		6.5	
CANCER POTENCY SLOPE		156,000	
BIOCONCENTRATION FACTOR		5,000	
ADOPTION DATE (ACTUAL/PLANNED)	/ /	05/01/92	/ /
EPA APPROVED?		N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)		05/17/91	/ /

COMMENT -

The State has proposed human health criteria for dioxin which are the same as EPA's Goldbook values. However, EPA anticipates that the State may actually adopt criteria which are less stringent than those proposed.



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STATE DICKIN CRITERIA FACT SHEET

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STATE WY  
EPA REGION 08

STATUS SUMMARY: NUMERIC CRITERIA ADOPTED

	ADOPTED CRITERIA	PROPOSED CRITERIA	EXPECTED CRITERIA
FRESH AQUATIC LIFE (Acute)			
FRESH AQUATIC LIFE (Chronic)			
MARINE AQUATIC LIFE (Acute)			
MARINE AQUATIC LIFE (Chronic)			
HUMAN HEALTH (Water and Fish)	0.013 ppq		
HUMAN HEALTH (Fish Only)			
HUMAN HEALTH (Water Only)			
RISK LEVEL	10-6		
FISH CONSUMPTION RATE (g/day)	6.5		
CANCER POTENCY SLOPE	156,000		
BIOCONCENTRATION FACTOR	5,000		
ADOPTION DATE (ACTUAL/PLANNED)	10/03/90		
EPA APPROVED?	YES	N/A	N/A
PROPOSAL DATE (ACTUAL/PLANNED)			

COMMENT

Wyoming adopted the Gold Book value assuming water and fish consumption.  
This criterion applies to all game fisheries and public water supplies.  
EPA approved the criterion on 3/8/91.