TETRYL 81

#### 7. REGULATIONS AND ADVISORIES

The international, national, and state regulations and guidelines regarding tetryl in air, water, and other media are summarized in Table 7-1.

ATSDR has not derived MRLs for tetryl because of the lack of reliable human or animal studies which identify levels of exposure associated with adverse health effects. In addition, EPA has not verified a reference dose (RfD) for oral exposure or a reference concentration (RfC) for inhalation exposure to tetryl.

The transportation of explosives including tetryl must be in accordance with the Department of Transportation hazardous material regulations (49 CFR 171-190) and the motor carrier safety regulations (49 CFR 390-398). Numerous states have established regulations on explosives for air quality control, solid waste disposal, storage, manufacture, and use.

Table 7-1. Regulations and Guidelines Applicable to Tetryl

Agency	Description	Information	Reference
NATIONAL			
Regulations: a. Air:			
OSHA	PEL TWA (skin designation)	1.5 mg/m <sup>3</sup>	OSHA 1989a (29 CFR 1910.1000) OSHA 1989b
b. Other			
DOT	Class A explosive (high explosive domestic transportation limited to road and water)(cargo only, in magazines)	Yes	DOT 1989a (49 CFR 172.101) DOT 1989b
Guidelines:			
a. Air ACGIH	TLV TWA	1.5 mg/m <sup>3</sup>	ACGIH 1991
NIOSH	REL (10-hour TWA) (skin designation)	1.5 mg/m <sup>3</sup>	NIOSH 1990
STATE			
Regulations and Guidelines: a. Air:			
	Acceptable Ambient Air Concentrations		NATICH 1991
СТ	8 hr avg. time	30.0 μg/m <sup>3</sup>	
FL-Pinellas	8 hr avg. time	15.0 μg/m <sup>3</sup>	
FL- Pinellas	8 hr avg. time	3.6 μg/m <sup>3</sup>	
MD		0.00	
ND	8 hr avg. time	15 μg/m <sup>3</sup>	
NV	8 hr avg. time	36 μg/m <sup>3</sup>	
TX	30 min avg. time	1.0 μg/m <sup>3</sup>	
TX	30 min. avg. time	0.1 μg/m <sup>3</sup>	
VA	24 hr avg. time	25 μg/m <sup>3</sup>	
кү	Significant emission levels of toxic air pollutants	3.827x10 <sup>-4</sup> pounds/hour	NREPC 1986 (KAR 401 63:022)

Table 7-1. Regulations and Guidelines Applicable to Tetryl (continued)

Agency	Description	Information	Reference
STATE (cont.)			
b. Other	Transportation of explosives is in accordance with the U.S. Department of Transportation hazardous materials regulations (49 CFR 171-190) and the motor carrier safety regulations (49 CFR 390-398) with some exceptions or additional requirements that vary from state to state. "Yes" in the Information column indicates that provisions for 49 CFR 171-170 and 49 CFR 390-398 exist in the specified state.		CELDs 1991
AL		Yes	
AK		Yes	
AZ		Yes	
CA		Yes	
СТ		Yes	
CO		Yes	
DE		Yes	
FL		Yes	
GA		Yes	
н		Yes	
ID		Yes	
IN		Yes	
IA		Yes	
LA		Yes	
MD		Yes	
MA		Yes	
Mi		Yes	
MN		Yes	
MS		Yes	
МО		Yes	
MT		Yes	
NE		Yes	
NJ		Yes	
NM		Yes	
NC		Yes	
ND		Yes	

Table 7-1. Regulations and Guidelines Applicable to Tetryl (continued)

gency	Description	Information	Reference
STATE (cont.)			
NY		Yes	
ОН		Yes	
OR		Yes	
RI		Yes	
SD		Yes	
TN		Yes	
TX		Yes	
UT		Yes	
VA		Yes	
VT		Yes	
WA		Yes	
WA-DC		Yes	
WV		Yes	
WI		Yes	
WY		Yes	
	Rules and regulations for air quality control and/or solid waste disposal have been established for explosives in general. The regulations vary from state to state.		CELDs 1991
AL	Pretreatment standards for discharge Hazardous waste: Thermal treatment	Yes Yes	
AZ	Solid waste collection	Yes	
AR	Solid waste storage and collection	Yes	
СО	Fugitive dust	Yes	
СТ	Hazardous waste: Thermal treatment	Yes	
FL	Hazardous waste: Thermal treatment	Yes	
GA	Open burning	Yes	
1L	Sewer discharge	Yes	
IN	Open burning	Yes	
KY	Hazardous waste management	Yes	
LA	Open burning	Yes	
MN	Hazardous waste management	Yes	

Table 7-1. Regulations and Guidelines Applicable to Tetryl (continued)

NH Open burning Yes  NJ Hazardous waste management Yes  NM Hazardous waste management Yes  NV Hazardous waste management Yes  NC Hazardous waste: Thermal treatment Yes  ND Fugitive emissions Yes  PA Fugitive emissions Yes  SC Open burning Yes  TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste management Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none	Agency	Description	Information	Reference
NJ Hazardous waste management Yes  NM Hazardous waste management Yes  NV Hazardous waste management Yes  NC Hazardous waste: Thermal treatment Yes  ND Fugitive emissions Yes  SC Open burning Yes  TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste: Thermal treatment Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK  CA  CT  GA  HI  Yes  GA  HI  Yes  NS  NS  Yes  NS  NS  Yes  NS  NS  Yes  NS  NS  Yes  Yes  NS  NS  NS  Yes  NS  NS  Yes  NS  NS  Yes  NS  NS  NS  NS  Yes  NS  NS  Yes  NS  NS  Yes  NS  NS  NS  Yes  NS  NS  NS  Yes  NS  NS  NS  NS  NS  NS  NS  NS  NS  N	STATE (cont.)			
NM Hazardous waste management Yes  NV Hazardous waste management Yes  NC Hazardous waste: Thermal treatment Yes  ND Fugitive emissions Yes  SC Open burning Yes  TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste management Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK  CA  CT  GA  HI  Yes  NS  NS  Yes  NS  NS  Yes  NS  NS  Yes  NS  NS  Yes	NH	Open burning	Yes	
NV Hazardous waste management Yes  NC Hazardous waste: Thermal treatment Yes  ND Fugitive emissions Yes  SC Open burning Yes  TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste management Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK Yes  CA Yes  CT Yes  GA Yes  HI Yes  KS Yes  KS Yes  NJ Yes	NJ	Hazardous waste management	Yes	
NC Hazardous waste: Thermal treatment Yes  ND Fugitive emissions Yes  PA Fugitive emissions Yes  SC Open burning Yes  TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste management Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK  CA  CT  Yes  GA  HI  Yes  IN  Yes  IN  Yes  NJ  NJ  Yes  NJ  NJ  Yes  NJ  NJ  Yes  NJ  Yes  NJ  NJ  NJ  NJ  NJ  NJ  NJ  NJ  NJ  N	NM	Hazardous waste management	Yes	
ND Fugitive emissions Yes  PA Fugitive emissions Yes  SC Open burning Yes  TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste management Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK  CA  CT  Yes  GA  HI  Yes  IN  Yes  IN  Yes  NJ	NV	Hazardous waste management	Yes	
PA Fugitive emissions  SC Open burning  TN Hazardous waste: Thermal treatment  UT Hazardous waste management  VT Open burning  VA Solid waste management  VYes  WI Open burning and malodorous emissions  WV  INDEX  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK  CA  CT  Yes  GA  HI  Yes  IN  Yes  IN  Yes  NJ  Yes  NJ  Yes  NJ  Yes  NJ  Yes  Yes  Yes  Yes  Yes  Yes  Yes  NJ  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye	NC	Hazardous waste: Thermal treatment	Yes	
SC Open burning Yes TN Hazardous waste: Thermal treatment Yes UT Hazardous waste management Yes VT Open burning Yes VA Solid waste management Yes WI Open burning and malodorous emissions Yes WV none Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK Yes CA Yes CT Yes GA Yes IN Ye	ND	Fugitive emissions	Yes	
TN Hazardous waste: Thermal treatment Yes  UT Hazardous waste management Yes  VT Open burning Yes  VA Solid waste management Yes  WI Open burning and malodorous emissions Yes  WV none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK Yes  CA Yes  CT Yes  GA Yes  HI Yes  IN Yes  IN Yes  KS Yes  NJ Yes	PA	Fugitive emissions	Yes	
UT Hazardous waste management Yes VT Open burning Yes VA Solid waste management Yes WI Open burning and malodorous emissions Yes WV none Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  CELDs 1991  AK Yes CA Yes CT Yes GA Yes HI Yes IN Yes IN Yes IN Yes IN Yes NJ Yes	sc	Open burning	Yes	
VT Open burning Yes VA Solid waste management Yes WI Open burning and malodorous emissions Yes WV none Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK Yes CA Yes CT Yes GA Yes HI Yes IN Yes IN Yes IN Yes NJ Yes	TN	Hazardous waste: Thermal treatment	Yes	
VA Solid waste management Yes WI Open burning and malodorous emissions Yes WV none Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK Yes CA Yes CT Yes GA Yes IN Yes IN Yes IA Yes IN Yes IA Yes NJ Yes	UT	Hazardous waste management	Yes	
WI Open burning and malodorous emissions Yes  WV none  MI none  Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  CELDs 1991  AK Yes  CA Yes  CT Yes  GA Yes  HI Yes  IN Yes	VT	Open burning	Yes	
WV WI Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK CA Yes CT Yes GA HI Yes IN Yes IA KS Yes NJ Yes NB NJ Yes	VA	Solid waste management	Yes	
Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK CA Yes CT Yes GA HI Yes IN Yes IA Yes NJ Yes	Wi	Open burning and malodorous emissions	Yes	
Explosive control laws regulate storage, manufacture, and use. The regulations vary from state to state.  AK CA Yes CT Yes GA HI Yes IN Yes IA Yes NJ Yes NS NS Yes NJ Yes	WV	•	none	
and use. The regulations vary from state to state.  AK CA Yes CT Yes GA HI Yes IN Yes IA Yes KS Yes NJ Yes NJ Yes NB Yes NJ Yes NJ Yes NJ Yes NJ Yes NJ Yes NJ Yes	WI		none	
CA       Yes         CT       Yes         GA       Yes         HI       Yes         IN       Yes         IA       Yes         KS       Yes         NJ       Yes         NB       Yes         NJ       Yes         NJ       Yes         NJ       Yes         NJ       Yes				CELDs 1991
CT       Yes         GA       Yes         HI       Yes         IN       Yes         IA       Yes         KS       Yes         NJ       Yes         NB       Yes         NJ       Yes         NJ       Yes         NJ       Yes         NJ       Yes	AK		Yes	
GA       Yes         HI       Yes         IN       Yes         IA       Yes         KS       Yes         NJ       Yes         NB       Yes         NJ       Yes         NJ       Yes         NJ       Yes         NJ       Yes	CA		Yes	
HI Yes IN Yes IA Yes KS Yes NJ Yes MS Yes NB Yes NJ Yes	CT		Yes	
IN Yes IA Yes KS Yes NJ Yes MS Yes NB Yes NJ Yes	GA		Yes	
IAYesKSYesNJYesMSYesNBYesNJYes	Н		Yes	
KSYesNJYesMSYesNBYesNJYes	IN		Yes	
NJ Yes MS Yes NB Yes NJ Yes	IA		Yes	
MS NB Yes NJ Yes	KS		Yes	
NB Yes NJ Yes	NJ		Yes	
NJ Yes	MS		Yes	
	NB		Yes	
OK Yes	NJ		Yes	
	ок		Yes	
OR Yes	OR		Yes.	

#### 7. REGULATIONS AND ADVISORIES

Table 7-1. Regulations and Guidelines Applicable to Tetryl (continued)

Agency	Description	Information	Reference
STATE (cont.)			
WA-DC		Yes	
wv		Yes	
WI	•	Yes	

NOTE: Units in table reflect values and units of measure designated by each agency in its regulations or advisories.

ACGIH = American Conference of Governmental and Industrial Hygienists; CELDs = Comprehensive Environmental Legislative Database; CFR = Code of Federal Regulations; DOT = Department of Transportation; NATICH = National Air Toxics Information Clearinghouse; NIOSH = National Institute for Occupational Safety and Health; OSHA = Occupational Safety and Health Administration; PEL = Permissible exposure limit; REL = Recommended Exposure Limits; TLV = Threshold limit value; TWA = Time weighted average

<sup>&</sup>lt;sup>a</sup>Not classifiable as to human carcinogenicity.