

**Chapter NR 668**

**APPENDIX VI**

**RECOMMENDED TECHNOLOGIES TO ACHIEVE DEACTIVATION OF CHARACTERISTICS IN S. NR 668.42**

The treatment standard for many characteristic wastes is stated in the s. NR 668.40 Table of Treatment Standards as “Deactivation and meet UTS.” The department has determined that many technologies, when used alone or in combination, can achieve the deactivation portion of the treatment standard. Characteristic wastes that are not managed in a facility regulated by ch. 283, Stats., or in a CWA-equivalent facility, and that also contain underlying hazardous constituents (see s. NR 668.02 (9)) shall be treated not only by a “deactivating” technology to remove the characteristic, but also to

achieve the universal treatment standards (UTS) for underlying hazardous constituents. The following appendix presents a partial list of technologies, utilizing the 5 letter technology codes established in s. NR 668.42, Table 1, that may be useful in meeting the treatment standard. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery or the use of other pretreatment technologies, provided deactivation is achieved and underlying hazardous constituents are treated to achieve the UTS.

Waste code/subcategory	Nonwastewaters	Wastewaters
D001 Ignitable Liquids based on 661.21 (1) (a) -- Low TOC Nonwastewater Subcategory (containing 1% to <10% TOC)	RORGS ..... INCIN ..... WETOX ..... CHOXD ..... BIODG .....	n.a.
D001 Ignitable Liquids based on 661.21 (1) (a) -- Ignitable Wastewater Subcategory (containing <1% TOC)	n.a. ....	RORGS INCIN WETOX CHOXD BIODG
D001 Compressed Gases based on 661.21 (1) (c) .....	RCGAS ..... INCIN ..... FSUBS ..... ADGAS fb. INCIN ADGAS fb. (CHOXD; or CHRED).	n.a.
D001 Ignitable Reactives based on 661.21 (1) (b) .....	WTRRX ..... CHOXD ..... CHRED ..... STABL ..... INCIN .....	n.a.
D001 Ignitable Oxidizers based on 661.21 (1) (d) .....	CHRED .....	CHRED
D002 Acid Subcategory based on 661.22 (1) (a) with pH less than or equal to 2	INCIN ..... RCORR ..... NEUTR ..... INCIN .....	INCIN NEUTR INCIN
D002 Alkaline Subcategory based on 661.22 (1) (a) with pH greater than or equal to 12.5	NEUTR .....	NEUTR
D002 Other Corrosives based on 661.22 (1) (b) .....	INCIN ..... CHOXD ..... CHRED ..... INCIN ..... STABL .....	INCIN CHOXD CHRED INCIN
D003 Water Reactives based on 661.23 (1) (b), (c), and (d) .....	INCIN ..... WTRRX ..... CHOXD ..... CHRED .....	n.a.
D003 Reactive Sulfides based on 661.23 (1) (e) .....	CHOXD ..... CHRED ..... INCIN ..... STABL .....	CHOXD CHRED BIODG INCIN

Waste code/subcategory	Nonwastewaters	Wastewaters
D003 Explosives based on 661.23 (1) (f), (g), and (h) . . . . .	INCIN . . . . . CHOXD . . . . . CHRED . . . . .	INCIN CHOXD CHRED BIODG CARBN
D003 Other Reactives based on 661.23 (1) (a) . . . . .	INCIN . . . . . CHOXD . . . . . CHRED . . . . .	INCIN CHOXD CHRED BIODG CARBN
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	CHOXD . . . . . CHRED . . . . . INCIN . . . . .	CHOXD CHRED BIODG CARBN INCIN
K045 Spent carbon from the treatment of wastewaters containing explosives	CHOXD . . . . . CHRED . . . . . INCIN . . . . .	CHOXD CHRED BIODG CARBN INCIN
K047 Pink/red water from TNT operations . . . . .	CHOXD . . . . . CHRED . . . . . INCIN . . . . .	CHOXD CHRED BIODG CARBN INCIN

Note: "n.a." stands for "not applicable"; "fb." stands for "followed by".