



PROCEDURE FOR SUBMITTING A PROPOSAL TO ADD A NEW OR DIFFERENT WASTE TO A CLASS I UIC INDUSTRIAL WASTE INJECTION WELL PERMIT

Procedure #: UICI-17
(4/11)

Narrative:

The UIC permit for a Class I Industrial Waste Injection well lists the wastes permitted for disposal into the well. In order for a new or different waste to be legally injected, the UIC permit must be modified to include the new or additional waste. The UIC permit also requires that the permittee notify KDHE of any facility changes or process modifications which may result in new, different or altered wastestreams, an increase in wastestream volumes, or an increase in concentration of pollutants at least one hundred eighty (180) days before such changes. It is recommended KDHE approval to dispose of the waste into the injection well be obtained before commencing any construction. The proposal to add a new or different waste will be evaluated by KDHE to determine if disposal into an injection well is feasible and, if feasible, determine what additional monitoring, testing or reporting requirements need will incorporated into the UIC permit. The minimum elements to be included in the proposal are listed in the guideline section below.

Procedure:

The proposal to add a new or different wastestream to the Class I UIC permit must be made in writing and include the following:

1. An analysis of a representative sample of the waste for the constituents listed on Attachment "A" 129 Priority Pollutants.
2. An analysis of a representative sample of the waste using the Toxic Characteristics Leaching Procedure for the constituents listed on Attachment "B".
3. An analysis of a representative sample of the waste for the minerals listed on Attachment "C", pH, oil and grease and total suspended solids.
4. Any additional analysis or tests for constituents which would be expected to be found in the waste or that are necessary to properly characterize the waste.
5. A Kansas certified laboratory certified to analyze for the required constituents shall be used. A list of certified laboratories is attached.
6. MSDS for any additives used.
7. A report describing the compatibility of the new wastestream with the existing wastestream, well components, injection interval, confining interval and the results of tests or studies conducted to evaluate compatibility.
8. Volume of waste to be generated.

9. A report describing why injection into a subsurface geologic formation is the most feasible method of disposal. This report should follow the format of the enclosed KDHE policy for determining the types of wastes that are eligible for disposal into an injection well. This report should include an evaluation of options including waste minimization and waste recycling technologies, discharge to a public owned treatment works, discharge to a total retention lagoon for evaporation, irrigation, or recycle, or NPDES discharge to surface water. Ponds must be constructed in accordance with the attached Industrial Wastewater Pond Liner policy.
10. Confirmation by appropriate calculations that UIC permit injection limits will not be exceeded.
11. Detailed diagrams, schematics and specifications describing the pipes and tanks or basins to be used to transfer, handle, collect, store, and subsequently direct the waste to the injections wells. Include a flow diagram.

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Procedure.UICI-17
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ATTACHMENT "A" PRIORITY POLLUTANTS

1. VOLATILE ORGANIC

COMPOUNDS (Method 624-Purge & Trap GC/MS) Detection limits nominally 10 ug/L for Acrolein and Acrylonitrile at 100 ug/L

Acrolein
Acrylonitrile
Benzene
Bromomethane
Bromodichloromethane
Bromoform
Carbon Tetrachloride
(Tetrachloromethane)
Chlorobenzene
Chloroethane
2-Chloroethylvinyl ether
Chloroform
Chloromethane (Methylchloride)
Dibromochloromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethane
1,2-Dichloropropane
cis-1,3-Dichloropropane
trans-1,3-Dichloropropane
Ethylbenzene
Methylene chloride
(dichloroemethane)
1,1,2,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
Toluene
Vinyl Chloride

2. ACID ORGANIC COMPOUNDS

(Method 625-Extractions GC-MS) Detection limits nominally 25 ug/L except for dinitro compounds at 250 ug/L

4-Chloro-3-methylphenol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2-Methyl-4,6- dinitrophenol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,4,6-Trichlorophenol

3. BASE/NEUTRAL ORGANIC

COMPOUNDS (Method 625-Extraction GC/MS) Detection limits nominally 10 ug/L

A. Polynuclear Aromatics
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (b) fluoranthene
Benzo (a) fluoranthene
Benzo (a) pyrene
Benzo (g,h,i) perylene
Chrysene
Dibenzo (a,h) anthracene
Fluoranthene
Fluorene
Indeno (1,2,3-cd) pyrene
Naphthalene
Phenanthrene
Pyrene
B. Ethers & Esters
Bis (2-chloroethyl) ether
Bis (2-chloroethoxy) methane
Bis (2-ethylhexyl) phthalate
Bis (2-chloroisopropyl) ether
4-Bromophenyl phenyl ether
Butyl benzyl phthalate
4-Chlorophenyl phenyl ether
Diethylphthalate
Dimethylphthalate
Diethylphthalate
Di-n-butylphthalate
Isophorone
C. Nitrogen Containing
Compounds
Benzidine
2,4-Dinitrotoluene
2,6- Dinitrothlune
1,2- Diphenylhydrazine
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodi-n-proplamine
N-Nitrosodiphenylamine
D. Chlorinated Hydrocarbons
2-Chloronaphthalene
1,3-Dichloronbenzene
1,4-Dichloronbenzene
1,2-Dichloronbenzene
3,3-Dichloronbenzidine
Hexachlorobenzene
Hexachlorobenzidine
Hexachloroethane

Hexachlorocyclopentadiene
2,3,7,8-Tetrachlorodibenzo-p- dioxin
1,2,4-Trichlorobenzene

4. PESTICIDE COMPOUNDS

(Method 625-Extraction GC/EC) Detection limits nominally 0.01ug/L

Aldrin
a-BHC
β-BHC
d-BHC
?BHC
Chlorodane
4,4'-DDD
4,4'DDD
4,4'DDT
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor Expoxide
Toxaphene
PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260

5. HEAVY METALS

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

6. MISCELLANEOUS

Cyanides
Phenols

ATTACHMENT "B"

TCLP REQUIREMENTS

The following constituents are regulated under the Toxicity Characteristic rule. The Waste Stream must be analyzed for these constituents using the Toxicity Characteristic Leaching Procedure (TCLP).

Benzene
Carbon tetrachloride
Chlordane
Chlorobenzene
Chloroform
m-Cresol
o-Cresol
p-Cresol
1,4- Dichlorobenzene
1,2- Dichloroethane
1,1 Dinitrotoluene
2,4- Dinitrotoluene
Heptachlor (and its hydroxide)
Hexachloro-1,3-butadiene
Hexachlorobenzene
Hexachloroethane
Methylethylketone
Nitrobenzene
Pentachlorophenol
Pyridine
Tertachloroethylene
Trichloroethylene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Vinyl chloride
Arsenic
Barium
Cadmium
Chromium
Lead
Mercury
Selenium
Silver
Endrin
Lindane
Methoxychlor
Toxaphene
2,4-Dichlorophenoxyacetic acid
2,4,5-Trichlorophenoxypropionic acid

**ATTACHMENT “C”
GEOCHEMICALS**

7. GEOCHEMICALS

Total Hardness (CaCO₃)

Calcium

Sodium

Magnesium

Potassium

Total Alkalinity

Chloride

Sulfate

Fluoride

Nitrate

Iron

Manganese

Ammonia

Phosphate

Silica

Specific Conductance

Total Dissolved Solids

Total Suspended Solids

Oil and Grease