

# **Appendix J**

## **Applicable Compost Standards and Permit Documents**

## Permitting References

Orlando, J. A., *Cogeneration Design Guide*, Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1996, pp. 183-185 (on permitting requirements for cogeneration facilities).

South Carolina State House Network 1999 Code of Regulations 61-9: Water Pollution Control Permits. Of particular interest are subsections 122 (NPDES), 124 (Decisionmaking), 403 (Pretreatment), 504 (Industrial Sludge) and 505 (Land Application).

South Carolina State House Network 1999 Code of Regulations 61-43: Standards for the Permitting of Agricultural Animal Facilities.

South Carolina State House Network 1999 Code of Regulations 61-62: Air Quality Permits. Of most interest is section 61-62.5 (Air Pollution Control Standards), particularly Standard 1 (Emissions from fuel burning operations) and Standard 8 (Toxic Air Pollutants).

South Carolina State House Network 1999 Code of Regulations 61-107: Solid Waste Management. Of particular interest are subsections 61-107.5 (Collection, Temporary Storage and Transportation of Municipal Solid Waste), 61-107.6 (Solid Waste Processing Facilities), 61-107.10 (Research, Development and Demonstration Permit Criteria), and 61-107.15 (Land Application of Solid Waste).

South Carolina DHEC Website (Environmental Agencies and Regulations):

<http://www.scdhec.net/eqc/>

South Carolina State House Network Website (Laws and Regulations):

<http://www.lpittr.state.sc.us/homepage.htm>

South Carolina Environmental Certification Board (Operator Certification):

<http://www.llr.state.sc.us/POL/Environmental/Default.htm>

Spartanburg Sanitary Sewer District Website: <http://www.sws-sssd.org/>

Spartanburg County Website: <http://www.spartanburgcounty.org/govt/>

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## Contact List for Permitting Agencies

### Federal

DOT, Office of Pipeline Safety, <http://www.ops.dot.gov/>

### State of South Carolina

DHEC, Bureau of Water

Melinda Vickers – 803-898-4186 Wastewater

Harvey Daniel -803-898-4033 Stormwater

DHEC, Bureau of Air Quality and Control

Larry Ragsdale 803-898-3840

DHEC, Bureau of Land and Waste Management

General Information, 803-896-4000

John Schnabl, Wood Waste Composting, 803-896-4216

Henry Gibson, Ag Waste Composting, 803-898-4230

April Grunsky, Research, Development and Demonstration Composting,  
803-896-4214

Willie Morgan, Ombudsman, 803-898-3432

DHEC, Appalachia III District

Barney Harmon – 864-596-3800

Public Service Commission

Utilities Department – 803-896-5125

Wayne Burdett, Utilities Dept. Mgr. – 803-896-5171

Randy Watts, Utilities Dept.

Brent Sires, Utilities Dept., Pipeline Safety, Landfill Gas Program –

803-896-5147, [brent.sires@psc.state.sc.us](mailto:brent.sires@psc.state.sc.us)

### County of Spartanburg

Dept. of Environmental Services

Mike McGrath, 864-596-3584

Spartanburg Sanitary Sewer District

Sam Kokely, 864-580-5685

Building and Fire Codes

Mike Padgett, 864-596-3182

Laurie Bailey

### County of Cherokee

Cherokee County Development Board

Jim Inman, Exec. Director, (864) 489-5721, [ccdevbrd@innova.net](mailto:ccdevbrd@innova.net)

Cherokee County Building Inspections and Code Enforcement Dept.

Michael Doles (864) 487-2561

### Town of Cowpens

City Hall 864-463-3201

Shirley Reynolds, Town Clerk (# same as above)

## Site Development in Spartanburg County and Cherokee County

To obtain a commercial permit in Cherokee County, the following are required:

1. Confirm 911 addressing.
2. Submit 3 sets of site and construction drawings.
3. If the structure will occupy more than 5,000 square feet or if the use is assembly, educational, or institutional purposes, the plans must be sealed by a state licensed architect or engineer.
4. The site will be reviewed for compliance with current land development regulations.
5. Have septic or sewer provider letter.
6. Plan review process will be approximately two weeks. Once plans are reviewed, a building permit can be issued.
7. Plan review and building permit fees must be paid before permit is issued.
8. If you are submitting architectural or engineered plans, please submit code-check letter from architect or engineer. We currently recognize the 1997 Standard Building Codes.
9. For permits over 30,000 dollars a state licensed contractor is required.
10. The contractor will need to have the following in order to be issued a permit:
  - cost of project
  - size of project
  - use of structure
  - contractor number and card.

The building may be occupied or used only after a final inspection and a certificate of occupancy is issued by the Building Codes Department.

For further information, call (864) 487-2561.

To obtain a commercial building permit in the County of Spartansburg (both Cowpens and unincorporated Spartansburg), the following steps are specified on the county website ([http://www.co.spartanburg.sc.us/govt/depts/adm\\_bfc/permitting/](http://www.co.spartanburg.sc.us/govt/depts/adm_bfc/permitting/)) :

1. Obtain an address for the new building location from the Addressing Dept.
2. Submit two (2) sets of site plans and construction drawings to the permitting department. If the structure will occupy more than 5,000 square feet or if the use is to be used for assembly, educational, or institutional purposes the plans must be sealed by a state licensed architect or engineer. The Plan Review Coordinator and Fire Marshal's Office will review your construction plans while the site development application is being checked for compliance.
3. Make a site development permit application so the site may be checked for compliance with the Development Standards Ordinance.
4. Make an application for a septic system or have a letter from the sewer service provider.
5. After approval of the site plan, the sewage disposal system and the construction drawings must be approved before the permit for construction can be issued. For permits over 5,000 dollars a state-licensed contractor is required.
6. The contractor will need to have the following information in order for the permit clerk to issue the building permit: cost of project, size of project, use of structure, contractor number.
7. The building may be occupied only after a final inspection and a certificate of occupancy is issued by the Building Codes Department.

For questions, contact Spartanburg County. Call (864) 596-2728 for general information. For technical questions related to building codes, contact Laurie Bailey at (864) 596-3173.

Until July 1, 2001, The 1997 versions of the Standard Building Codes (also Structural, Mechanical and Plumbing) and the 1999 version of the National Electrical Code are in effect for Cowpens and unincorporated Spartanburg County. After July 1, 2001, The 2000 International Building Codes will be in effect. (This information is from Mike Padgett, Tel. (864) 596-3182.)

The following items may be necessary in the pre-construction phase:

1. If the property is to be leased, a written authorization letter is required from the Property Owner.
2. Site Plan at a scale of not less than 1" = 20' or more than 1" = 100' with a recorded plat.
3. Location and Use of adjacent buildings or land parcels to the proposed development (including future development – if known)
4. Square Footage and height of all structures.
5. Proposed location, arrangement and Setback Dimensions of all buildings from the property lines and street or road right-of-way lines
6. Arrange the locations of the required Bufferyards, with a required landscaping plan with plant materials identified (determined at time of site inspection)
7. The location and number of all Off-Street Parking (identify handicapped)
8. Street name(s) and road right-of-way width(s)
9. The location and dimension of all existing and proposed Vehicular Drives, entrances, exits, and traffic circulation patterns
10. \$200.00 Development Permit Application Fee – Major Project

The items below must be submitted and approved after the Development Permit is approved and issued, but before the BUILDING PERMIT can be obtained:

1. Submit grading, storm water management plans and encroachment permit application to Environmental Services (Mike McGrath or Ray Sistare 596-3586);
2. Submit Building Plans/Mechanical (2 sets) to Building Codes Plan Review Department (Linda Parr or Kris Brannon – Plan Review Coordinators – 596-2727);
3. A sewer letter of DHEC approval must be obtained;
4. Fire Marshal's approval must be obtained (Rick Butts – 596-3612).

Source: Spartanburg County Website

## Maximum Allowable Concentrations of Toxic Air Pollutants

(Adapted from SCCOR 61-62.5, Standard 8, Section II.E. Please refer to the actual standard for verification of numbers.)

E. The allowable ambient air concentrations of a toxic air pollutant beyond the plant property line as determined by modeling under Part A shall be limited to the value listed in the following table. The pollutants are divided into three categories based on chronic exposure as follows: Category 1: Low Toxicity - Those pollutants which cause readily reversible changes which disappear after exposure ends. Category 2: Moderate Toxicity - Those pollutants which may cause chronic reversible or irreversible changes that are not severe enough to result in death or permanent injury. Category 3: High Toxicity - Those pollutants which may cause chronic effects that result in death or permanent injury after very short exposure to small quantities.

CHEMICAL NAME	CAS NO.	CATEGORY	Max $\mu\text{g}/\text{m}^3$
Acetaldehyde	75-07-0	2	1800.00
Acetamide	60-35-5	3	TBD
Acetic Anhydride	108-24-7	1	500.00
Acetonitrile	75-05-8	1	1750.00
Acetophenone	98-86-2	3	TBD
2-Acetylaminofluorne	53-96-3	3	TBD
Acrolein	107-02-8	3	1.25
Acrylamide	79-06-1	2	0.30
Acrylic Acid	79-10-7	3	147.50
Acrylonitrile	107-13-1	3	22.50
Aldicarb	116-06-3	2	6.00
Allyl Chloride	107-05-1	2	30.00
p-Aminodiphenyl (4-Aminobiphenyl)	92-67-1	3	0.00
Ammonium Chloride	12125-02-9	1	250.00
Aniline	62-53-3	3	50.00
o-Anisidine	90-04-0	3	2.50
p-Anisidine	104-94-9	3	2.50
Antimony Compounds	>	1	2.50
Arsenic Pentoxide	1303-28-2	3	1.00
Arsenic	7440-38-2	3	1.00
Benzene	71-43-2	3	150.00
Benzidine	92-87-5	3	0.00
Benzotrichloride	98-07-7	3	300.00
Benzyl Chloride	100-44-7	3	25.00
Beryllium Oxide	1304-56-9	3	0.01
Beryllium Sulfate	13510-49-1	3	0.01
Beryllium	7440-41-7	3	0.01
Biphenyl	92-52-4	TBD	6.00
Bis(Chloromethyl) Ether	542-88-1	3	0.03
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7		3
Bromoform	75-25-2	3	25.85
1,3-Butadiene	106-99-0	3	110.50
1-Butanethiol (n-Butyl Mercaptan)	109-79-5	2	15.00
n-Butylamine	109-73-9	3	75.00
Cadmium Oxide	1306-19-0	3	0.25
Cadmium Sulfate	10124-36-4	3	0.20
Cadmium	7440-43-9	3	0.25

25.00

Calcium Cyanamide	156-62-7	3		2.50
Caprolactam, vapor	105-60-2	1	500.00	
Caprolactam, dust	105-60-2	1		25.00
Captan	133-06-2	3		25.00
Carbaryl	63-25-2	3		25.00
Carbon Disulfide	75-15-0	3		150.00
Carbon Tetrachloride	56-23-5	3		150.00
Carbonyl Sulfide	463-58-1	3		12250.00
Catechol	120-80-9	3		297.00
Chloramben	133-90-4	3		TBD
Chlordane	57-74-9	3		2.50
Chlorine	7782-50-5	1		75.00
Chloroacetic Acid	79-11-8	3		900.00
2-Chloroacetophenone	532-27-4	1		7.50
Chlorobenzene	108-90-7	3		1725.00
Chlorobenzilate	510-15-6	3		TBD
Chloroform	67-66-3	3		250.00
Chloromethyl Methyl Ether	107-30-2	3		TBD
p-Chloronitrobenzene	100-00-5	3		5.00
Chloroprene	126-99-8	3		175.00
Chromium(6) Compounds	>	3		2.50
Cobalt Compounds	>	3		0.25
Coke Oven Emissions	>	3		
Cresols/cresylic acid and mixture	1319-77-3	3		220.00
m-Cresol	108-39-4	3		110.50
o-Cresol	95-48-7	3		110.50
p-Cresol	106-44-5	3		110.50
Cumene	98-82-8	2		9.00 #
Cyanamide	420-04-2	1		50.00
Cyanic Acid	420-05-3	1		500.00
Cyanide	57-12-5	1		125.00
Cyanide compounds [FN1]	>	1		TBD
Cyanoacetamide	107-91-5	1		125.00
Cyanogen	460-19-5	1		500.00
2,4-D,salts and esters	94-75-7	3		50.00
DDE	3547-04-4	3		TBD
Diazomethane	334-88-3	3		2.00
Dibenzofuran	132-64-9	3		TBD
1,2-Dibromo- 3-chloropropane	96-12-8	3		0.05
Dibutylphthalate	84-74-2	3		25.00
p-Dichlorobenzene	106-46-7	2		4500.00
3,3-Dichlorobenzidine	91-94-1	3		0.15
1,3-Dichloropropene	542-75-6	3		20.00 #
Dichlorvos	62-73-7	3		4.52
Diethanolamine	111-42-2	2		129.00
n,n-Diethylaniline (n,n-Dimethylaniline)	121-69-7	2		250.00
Diethyl Phthalate	84-66-2	3		25.00
Diethyl Sulfate	64-67-5	3		TBD
Diisodecyl Phthalate	2671-40-0	2		50.00
3,3-Dimethoxybenzidine	119-90-4	3		0.30
3,3'-Dimethyl Benzidine	119-93-7	3		TBD
Dimethyl Carbamoyl				

Chloride	79-44-7	3	TBD	
Dimethyl Formamide	68-12-2	2	300.00	
1,1-Dimethyl Hydrazine	57-14-7	3	5.00	
1,2-Dimethyl Hydrazine	540-73-8	3	5.00	
Dimethyl Phthalate	131-11-3	3	25.00	
Dimethyl Sulfate	77-78-1	3	2.50	
4-Dimethylaminoazobenzene	60-11-7	3	125.00	
m-Dinitrobenzene	99-65-0	2	10.00	
4,6-Dinitro-o-cresol and salts	534-52-1	2	2.00	
2,4-Dinitrophenol	51-28-5	3	TBD	
2,4-Dinitrotoluene	121-14-2	3	1.50	
Dioctyl Phthalate	117-84-0	2	50.00	
1,4-Dioxane	123-91-1	3	450.00	
1,2-Diphenylhydrazine	122-66-7	3	TBD	
Epichlorohydrin	106-89-8	3	50.00	
1,2-Epoxybutane	106-88-7	3	TBD	
Ethanthiol	75-08-1	2	10.00	
Ethanolamine	141-43-5	1	200.00	
Ethyl Acrylate	140-88-5	3	102.50	
Ethyl Benzene	100-41-4	2	4350.00	
Ethyl Chloride	75-00-3	2	26400.00	
Ethylene Dibromide	106-93-4	2	770.00	
Ethylene Dichloride	107-06-2		3	200.00
Ethylene Glycol	107-21-1	3	650.00	
Ethylene Oxide	75-21-8	3	10.00	
Ethylene Thiourea	96-45-7	3	TBD	
Ethylene Imine	151-56-4	3	5.00	
Ethylidene Dichloride	75-34-3	3	2025.00	
Formaldehyde	0-00-0	2	15.00	
Formamide	75-12-7	1	750.00	
Formic Acid	64-18-6	1	225.00	
Furfural	98-01-1	1	200.00	
Furfuryl Alcohol	98-00-0	2	400.00	
Glycidaldehyde	765-34-4	3	75.00	
Glycol Ethers [FN2] (mono- and di-ethers of diethylene glycol or triethylene glycol)	>	1	TBD	
Glycol Ethers [FN2] (mono- and di-ethers of ethylene glycol)	>	3	TBD	
Heptachlor	76-44-8	3	2.50	
Hexachlorobenzene	118-74-1	3	TBD	
Hexachlorobutadiene	87-68-3	3	1.20	
Hexachlorocyclohexane (multiple isomers)	608-73-1	2	5.00	
Hexachlorocyclopentadiene	77-47-4	3	0.50	
Hexachloroethane	67-72-1	3	48.50	
Hexachloronaphthalene	1335-87-1	3	1.00	
Hexamethylene-1, 6 -diisocyanate	822-06-0	2	0.34	
Hexamethylphosphoramide	680-31-9	3	14.50	
Hexane	110-54-3	3	900.00	
Hydrazine	302-01-2	3	0.50	
Hydrochloric Acid	7647-01-0	1	175.00	
Hydrogen Cyanide	74-90-8	1	250.00	
Hydrogen Sulfide	7783-06-4	2	140.00	

Hydroquinone	123-31-9	2	20.00
Isophorone	78-59-1	2	250.00
Isopropylamine	75-31-0	1	300.00
Kepone (Chlordecone)	143-50-0	3	0.00
Ketene	463-51-4	3	4.50
Lead Arsenate	7645-25-2	3	0.75
Lead(2) Arsenate	7784-40-9	3	0.75
Lindane	58-89-9	3	2.50
Malathion	121-75-5	2	100.00
Maleic Anhydride	108-31-6	2	10.00
Manganese Compounds	>	3	25.00
Mercury	7439-97-6	3	0.25
Methanol	67-56-1	3	1310.00
Methoxychlor	72-43-5	3	50.00
Methyl Bromide	74-83-9	3	100.00
Methyl Chloride	74-87-3	3	515.00
Methyl Chloroform (1,1,1-Trichloroethane)	71-55-6	3	9550.00
Methylene Biphenyl Isocyanate	101-68-8	2	2.00
4,4-Methylene Bis(2-chloroaniline)	101-14-4	3	1.10
4,4-Methylenedianiline	101-77-9	3	4.00
Methyl Ethyl Ketone (2-Butone)	78-93-3	1	14750.00
Methyl Hydrazine	60-34-4	3	1.75
Methyl Iodide	74-88-4	3	58.00
Methyl Isobutyl Ketone	108-10-1	2	2050.00
Methyl Isocyanate	624-83-9	3	0.23
Methyl Mercaptan	74-93-1	2	10.00
Methyl Methacrylate	80-62-6	1	10250.00
Methylamine	74-89-5	1	300.00
Methylene Chloride	75-09-2	1	8750.00
Methyl-t-Butyl Ether	1634-04-4	1	TBD
Mineral Fibers, Fine [FN3]	>	3	TBD
Mineral Oil Mist (Paraffin Oil)	8012-95-1	3	25.00
Mirex	2385-85-5	3	4500.00
Naphthalene	91-20-3	1	1250.00
a-Naphthylamine	134-32-7	3	0.00
b-Naphthylamine	91-59-8	3	0.00
Nickel Carbonyl	13463-39-3	3	1.75
Nickel Oxide	1313-99-1	3	5.00
Nickel Sulfate	7786-81-4	3	5.00
Nickel	7440-02-0	3	0.50
Nitric Acid	7697-37-2	1	125.00
p-Nitroaniline	100-01-6	3	15.00
Nitrobenzene	98-95-3	3	25.00
4-Nitrobiphenyl	92-93-3	3	0.00
Nitrogen Mustard	51-75-2	3	0.00
Nitroglycerin	55-63-0	2	5.00
p-Nitrophenol	100-02-7	3	0.00
1-Nitropropane	108-03-2	1	2250.00
2-Nitropropane	79-46-9	3	182.00
p-Nitrosophenol	104-91-6	3	0.00

n-Nitroso-n-methylurea	684-93-5	3	TBD
n-Nitrosodimethylamine	62-75-9	3	0.00
n-Nitrosomorpholine	59-89-2	3	5000.00
p-Nitrotoluene	99-99-0	3	5.50
Octachloronaphthalene	2234-13-1	3	0.50
Oxalic Acid	144-62-7	2	10.00
Paraquat	1910-42-5	3	0.50
Parathion	56-38-2	3	0.50
Pentachloronitrobenzene (Quintobenzene)	82-68-8	3	TBD
Pentachlorophenol	87-86-5	2	5.00
Phenol	108-95-2	2	190.00
p-Phenylenediamine	106-50-3	2	1.00
Phenylhydrazine	100-63-0	2	200.00
Phosgene (Carbonyl Chloride)	75-44-5	2	4.00
Phosphine	7803-51-2	3	2.09
Phosphoric Acid	7664-38-2	1	25.00
Phosphorus	7723-14-0	2	0.50
Phthalic Anhydride	85-44-9	3	30.30
Picric Acid	88-89-1	2	1.00
Polychlorinated Biphenyls (PCB) (multiple compounds)	>	3	2.50
Polycyclic Organic Matter [FN4]	>	3	160.00
1,3-Propane Sultone	1120-71-4	3	TBD
b-Propiolactone	57-57-8	3	7.50
Propionaldehyde	123-38-6	1	TBD
Propoxur	114-26-1	3	2.50
Propylene Dichloride	78-87-5	3	1750.00
Propylene Oxide	75-56-9	3	250.00
1,2-Propylenimine	75-55-8	3	23.35
Pyrethrin I	121-21-1	3	25.00
Pyrethrin II	121-29-9	3	25.00
Pyrethrum	8003-34-7	2	50.00
Quinoline	91-22-5	3	TBD
Quinone	106-51-4	3	2.00
Rotenone	83-79-462	2	50.00
Selenium Compounds	>	3	1.00
Sodium Hydroxide [FN5]	1310-73-2	1	50.00
Styrene	100-42-5	1	5325.00
Styrene Oxide	96-09-3	3	TBD
Sulfuric Acid	7664-93-9	2	10.00
Tetrachlorinate Dibenzo-p-dioxins	1746-01-6	3	0.00
1,1,2,2-Tetrachloroethane (Acetylene Tetrachloride)	79-34-5	3	35.00
Tetrachloroethylene (Perchloroethylene)	127-18-4	2	3350.00
Titanium Tetrachloride	7550-45-0	1	2500.00
Toluene	108-88-3	3	2000.00
2,4-Toluenediamine	95-80-7	3	TBD
Toluene Diisocyanate	26471-62-5	2	0.40
Toluene-2,4- diisocyanate	584-84-9	2	0.40

o-Toluidine	95-53-4	3	43.85
Toxaphene	8001-35-2	3	2.50
1,2,4-Trichlorobenzene	120-82-1	2	400.00
1,1,2-Trichloroethane	79-00-5	3	273.00
Trichloroethylene	79-01-6	1	6750.00
2,4,5-Trichlorophenol	95-95-4	3	TBD
2,4,6-Trichlorophenol	88-06-2	3	TBD
Triethylamine	121-44-8	3	207.00
Trifluralin	1582-09-8	3	TBD
2,2,4-Trimethylpentane	540-84-1	1	8750.00
Urethane (Carbamic Acid Ethyl Ester)	51-79-6	2	5000.00
Vinyl Acetate	108-05-4	3	176.00
Vinyl Bromide	593-60-2	3	100.00
Vinyl Chloride	75-01-4	3	50.00
Vinyl Fluoride	75-02-5	2	19.00
Vinylidene chloride	75-35-4	3	99.00
Xylene	1330-20-7	2	4350.00
m-Xylene	108-38-3	2	4350.00
o-Xylene	95-47-6	2	4350.00
p-Xylene	106-42-3	2	4350.00
Xylidine	1300-73-8	3	50.00

[FN\*] For the purpose of this standard, these values shall be rounded to the nearest hundredth of a  $\mu\text{g}/\text{m}^3$ . For example, a test or modeled value of 0.005 through 0.01 would be rounded to 0.01 but values less than 0.005 would be rounded to 0.00.

TBD to be determined

> No CAS number.

# Verified reference concentration(RfC) established by the United States Environmental Protection Agency.

1. XCN where X = H or any other group where a formal dissociation may occur. For example KCN or  $\text{Ca}(\text{CN})_2$ .

2. Includes mono- and di-ethers of ethylene glycol, diethylene glycol and triethylene glycol  $\text{R}-(\text{OCH}_2\text{CH}_2)_n-\text{OR}'$ , where:

$n = 1, 2, \text{ or } 3$

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure:  $\text{R}-(\text{OCH}_2\text{CH}_2)_n-\text{OH}$

Polymers are excluded from the glycol category.

Mono- and di-ethers of ethylene glycol are category 3 air toxics; mono- and di-ethers of diethylene glycol and triethylene glycol are category 1 air toxics.

3. Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, and slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

4. Includes organic compounds with more than one benzene ring and which have a boiling point greater than or equal to 100  $^\circ\text{C}$ .

5. The use of sodium hydroxide in a scrubber for air pollution control purposes is exempt from this standard.

Note: For all listings above that contain the word "compounds" and for glycol ethers the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named element (i.e. antimony, arsenic, etc.) as part of that chemical infrastructure

## **Excerpts from S.C. COR61-107.6: Solid Waste Processing Facilities**

*61-107.6. Solid Waste Management: Solid Waste Processing Facilities.*

*A.1. This regulation establishes the procedures, documentation, and other requirements which must be met for the proper operation and management of all solid waste processing facilities, including the processing activities involving the unrecoverable solid waste at a Materials Recovery Facility. However, this regulation does not apply to Recovered Materials Processing Facilities.*

*A.2. Waste tire processing facilities and composting facilities shall comply with their respective regulations, unless otherwise specified by the Department.*

*B.10. "Materials recovery facility" means a solid waste management facility that provides for the extraction from solid waste of recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.*

*B.16. "Recovered materials processing facility" means a facility engaged solely in the recycling, storage, processing, and resale or reuse of recovered materials. The term does not include a solid waste handling facility; however, any solid waste generated by such facility is subject to all applicable laws and regulations relating to the solid waste.*

*B.17. "Solid waste" means any garbage, refuse, or sludge from a waste treatment facility, water supply plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities. This term does not include solid or dissolved material in domestic sewage, recovered materials, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to NPDES permits under the Federal Water Pollution Control Act, as amended, or the Pollution Control Act of South Carolina, as amended.... Also excluded from this definition are application of fertilizer and animal manure during normal agricultural operations..., which will not have a significant adverse impact on the environment.*

*B.20. "Solid waste processing facility" means a combination of structures, machinery, or devices utilized to reduce or alter the volume, chemical, or physical characteristics of solid waste through processes, such as baling or shredding, prior to delivery of such waste to a recycling or resource recovery facility or to a solid waste treatment, storage, or disposal facility and excludes collection vehicles.*

*C.4. No permit for construction, or expansion of an existing solid waste processing facility shall be issued until a demonstration of need is submitted to and approved by the Department in accordance with Code Section 44-96-290. This does not apply to industrial facilities managing solid waste generated in the course of normal operations on property under the same ownership or control as the solid waste management facility if the industrial facility is not a commercial solid waste management facility.*

*C.6. A permit shall be required for each site or facility although the Department may include one (1) or more different types of facilities in a single permit if the facilities are collocated on the same site.*

*D. Permit Application Requirements and Design Criteria.*

*1. Prior to construction, modification, or operation of a solid waste processing facility a permit shall be obtained from the Department. The application shall be signed by an engineer duly licensed and registered under the laws of the State of South Carolina.*

*2. Any person wishing to obtain a permit from the Department to operate a solid waste processing facility, shall submit to the Department three (3) copies of the following documents:*

*a. A completed permit application, on a form provided by the Department;*

*b. An engineering report which shall include the following:*

*(1) an overall description of the facility;*

*(2) a description of the process and equipment to be used;*

- (3) a description of the proposed service area;*
- (4) a description of the types and quantities of waste to be processed;*
- (5) a description of the existing site;*
- (6) a description of the security measures, including but not limited to fences, gates, signs; and,*
- (7) the location of disposal or recycling facilities which will accept the processed waste;*
- c. Complete construction plans and specifications that at a minimum address the following:*
  - (1) loading and unloading areas;*
  - (2) access roads;*
  - (3) processing areas;*
  - (4) actual or calculated weight of all solid waste accepted at the facility;*
  - (5) storage areas for incoming solid waste; and,*
  - (6) a map showing the specific location, land use, and zoning within one-fourth ( 1/4) mile of the boundaries of the proposed facility;*
- d. All tipping areas shall be located within an enclosed building or covered area and all waste shall be contained in the tipping area.*
- e. A design report for the facility which shall provide the technical details and specifications necessary to support the design plans;*
- f. A complete description of the personnel training program;*
- g. An identification of possible air releases and groundwater and surface water discharges that may occur;*
- h. A waste control plan describing the manner in which waste from the processing activities will be managed. The plan shall, at a minimum, address the following:*
  - (1) ensure that the facility processes only waste specifically authorized by the Department;*
  - (2) provide a program to identify, control, separate out, record, and prevent waste not authorized by the Department to be processed at the facility from being accepted at the facility. The plan shall include a description of how these wastes will be handled and disposed if received at the facility and shall include provisions to notify the Department by inclusion in the annual monitoring report of the receipt and disposal of such wastes. No permit will be issued until a waste control plan has been approved by the Department; and,*
  - (3) identify the facilities approved by the Department that will receive the processed waste and a certification that such facilities have adequate capacity to manage the processed waste;*
- i. A quality assurance and quality control report. The facility owner or operator shall institute a control program (including measures such as signs, monitoring, alternate collection programs, passage of local laws, etc.) to assure that only solid waste authorized by the Department is being processed at the facility;*
- j. A written contingency plan. This plan shall set forth operating procedures to be employed during periods of non-operation (e.g. equipment breakdown) which will require standby equipment, extension of operating hours, or diversion of solid waste to other facilities;*
- k. A narrative description of the general operating plan for the facility, including the origin, composition and weight or volume of solid waste that is to be processed at the facility, the process to be used at the facility, the daily operational methodology of the process, the loading rate, the proposed capacity of the facility and the expected life of the facility. The plan shall include a descriptive statement of any materials recycling or reclamation activities to be operated in conjunction with the facility on incoming solid waste. The plan shall describe how the facility will meet all applicable regulatory requirements;*
- l. An operation and maintenance manual describing how the facility shall be maintained and operated in accordance with the intended use of the facility. Equipment in use at the facility shall be maintained in good working order;*
- m. A detailed closure plan which shall identify the steps necessary to close the facility. The plan may be amended at any time during the active life of the facility with Department approval. The plan shall be amended whenever changes in operating plans or facility design affect the closure plan, or whenever there is a change in the expected year of closure;*
- n. A description and explanation of any restrictions the facility places on the materials it receives for processing; and,*
- o. A demonstration of financial responsibility. The owner or operator of each facility shall establish sufficient financial assurance to ensure satisfactory maintenance, closure, and post-closure of the*

facility; or to carry out any corrective action which may be required as a condition of a permit. Consideration shall be given to mechanisms which would provide flexibility to the owner or operator in meeting its financial obligations. The owner or operator shall be allowed to use combined financial responsibility mechanisms for a single facility and shall be allowed to use combined financial responsibility mechanisms for multiple facilities, utilizing actuarially sound risk-spreading techniques.

*COR 61-107.6.F. Operations Criteria [for Solid Waste Processing Facilities]*

*A solid waste processing facility shall be designed and operated according to the minimum criteria listed in this section.*

- 1. Access Controls. The operator shall restrict the presence of, and shall minimize the possibility of any unauthorized entry onto the facility site. A statement of the days and hours of operation shall be posted at the entrance of the facility and access, except for Department and/or emergency personnel, shall be limited to those times when authorized personnel are on duty.*
- 2. Reporting and Record Keeping Requirements. All facilities shall:*
  - a. Notify the Department's District Director, in the district in which the facility is located, if an unscheduled total facility shutdown exceeds twenty-four (24) hours;*
  - b. Prepare and submit to the Department an annual report in a form provided by or acceptable to the Department by October 15, for the previous fiscal year; and,*
  - c. Maintain a copy of all required reports at the facility for a period not less than five (5) years, and make these reports available to Department personnel upon request.*
- 3. Receipt and Handling of Solid Waste.*
  - a. The facility is authorized to process only solid waste specified by Department permit. The weight and/or volume of all solid waste processed at the facility shall be recorded and incorporated into the annual report.*
  - b. All delivered solid waste shall be processed and contained at a facility designed in a way to minimize the effects of weather, wind, and precipitation. External storage of putrescible solid waste is prohibited. No putrescible waste shall remain at the site at the end of each working day unless it is stored in a manner to promote vector control. Solid waste identified as nonputrescible recyclables or oversized, bulky, or untreatable solid waste may be temporarily stored outside, on the premises for a period not to exceed one (1) week unless an extension is requested and approved by the Department. Any solid waste that is stockpiled or remains in storage shall be maintained so as to not create a nuisance or a sanitary or environmental problem. Litter, odors, rats, insects, flies, mosquitos, and other vectors shall be prevented and controlled at the facility.*
  - c. The tipping areas shall be constructed of low permeability materials (e.g. concrete, asphalt), provided with a water supply for cleaning purposes, and equipped with drains, pumps, or equivalent means to facilitate the removal of water for proper disposal.*
  - d. The transfer structures, buildings, and ramps shall be constructed of materials that can be easily cleaned.*
  - e. Leachate and washwater from a solid waste processing facility shall not be allowed to drain or discharge into waters of the State unless an effluent disposal permit (e.g. land application, or NPDES) is approved by the Department.*
  - f. Solid waste processing facilities shall comply with all applicable Federal, State, and local air quality standards.*
  - g. The processing facility shall arrange for delivery of any residual or other waste resulting from the processing to a disposal facility which is:*
    - (1) permitted by the Department if located in South Carolina; or,*
    - (2) permitted by the appropriate environmental regulatory agency if located in another state.*
- 4. Process changes. The owner or operator shall receive approval from the Department in writing of all process changes before they are implemented. Process changes such as those made to increase the recovery of recyclable materials do not require approval. Permit modifications shall be required as deemed necessary by the Department.*
- 5. Emergency preparedness. In addition to requirements set forth in the contingency plan, all processing facilities shall at a minimum:*
  - a. Provide adequate aisle space to allow for emergency equipment;*
  - b. Be equipped with the following:*

- (1) an internal communications system capable of providing immediate emergency instruction to facility personnel and an alarm system to notify facility personnel of an emergency condition;*
- (2) a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, and State or local emergency response teams;*
- (3) portable fire extinguishers, fire control equipment and spill control equipment; and,*
- (4) water available at adequate volume and pressure to supply water hose streams, automatic sprinklers, or water spray systems;*
- c. Test and maintain as necessary to assure its proper operation, all facility emergency equipment including, but not limited to, communications or alarm systems, fire protection equipment, spill control equipment, and personal safety equipment;*
- d. Provide immediate access for all personnel involved in the facility operation to an internal alarm or emergency communication device; and,*
- e. Provide for an emergency coordinator.*
- 6. Guidelines for identifying items or materials that may not be accepted for processing. The guidelines shall ensure that the facility accepts and processes only waste specifically authorized by the Department to be processed at the facility.*
- 7. Trained personnel shall be present at all times during the operation of the facility.*

*61-107.6.L. A permit issued pursuant to this regulation shall be effective for the design and operational life of the facility, to be determined by the Department. At least once every five (5) years, the Department will review the environmental compliance history of each permitted solid waste processing facility.*

## **Appendix E**

### **Necessary Project Permitting Application Forms**

NPDES Form 1  
NPDES Form 2D  
NPDES Form 2F  
(Spartanburg Wastewater System Industrial User Application)