COMPOSTING CHECKLIST					
Ne	w Perr	nits or Expansion of Per	mitted Boundary		
(Shaded areas for DEQ use only)					
Facility Name:				OAC 252:515	
Applicant:	Applicant:				
Composting Facility Class:		Tier I or Tier II; (Tier III if			
County:		Date:			
Edoctus or Database No.:	ODEQ Login / Permit No		:		
Administrative Reviewer:	Start	Date:	Completion Date:	Deadline:	
Technical Reviewer:	Start	Date:	Completion Date:	Deadline:	

ITEM #	State or Federal Regulations Statutes or DEQ Rules (OAC) or Guidelines*	GENERAL DESCRIPTION	Admin Complete	Technically Complete	Remarks
PLAN	NS AND PERMITS				
1	252:515-43-31	Exempt. Non- commercial facilities that receive less than fifty (50) tons or one hundred (100) cubic yards of Type 1 and/ or Type 2 feedstock per year, generated <u>on site</u> are considered exempt from the permitting and plan requirements of OAC 252:515-3-1, but may be subject to other requirements.			
2	252:515-43-32	Plan Requirements: Special event composting requires a plan approved by DEQ prior to construction and operation. The plan shall include, at a minimum, the information outlined in OAC 252:515-3-2(b) and compliance with the operational standards outlined in Part 5 of 252:515-43.			
3	252:515-43-33 252:004-7-58 & 7-59	Permit Requirements: Class I, II, III, IV composting facilities require a solid waste permit for DEQ prior to construction and operation. Class I facilities require Tier I permit applications; All other classes of compositing facilities require Tier II permits.			
FILING	OF APPLICATION	During the planning stages and prior to filing a formal application, it is recommended that a preliminary site investigation be completed to determine if the proposed site meets the location standards as required in OAC 252:515-5 and outlined in the Location Standards Section below. DEQ recommends a pre-application meeting between representatives of DEQ and the applicant prior to filing the formal application.			
PUBLIC	C PARTICIPATION	Information regarding the pending Tier II or III permit application shall be made available to the public as required in 252:004-7-13. This notice is to allow concerned individuals an opportunity to voice opposition or support.			
4	252:004-7-13(a), (c), & (d)	Public Notice of the Tier II or III Application being filed with the DEQ shall be made. A draft notice of the publication containing the items in OAC 252:004-7-13(c) shall be provided to DEQ for review prior to publication. Proof of Publication shall be submitted within 20 days to the DEQ consisting of a copy of the publication in one newspaper, in addition to an affidavit from the publisher showing the date of publication.			

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5	252:004-7-13(b)	Applicants shall certify by affidavit that they own the real property, have a current lease or easement which is given to accomplish the permitted purpose or have provided legal notice to the landowner.			
6	252:515-3-33 & 34	Application signed under oath by the owner/operator on forms provided by DEQ. Legal Right to Property: Assurance of sufficient interest in the land for which the permit is sought to construct and operate, in addition to right of access & Easement to DEQ. Include a current copy of the lease.			
7	252:515-3-35	Engineer of Record shall affix his/her seal (if applicable) to the application page and each map & drawing in accordance with OAC 245:15-17 (OK PELS rules), as certification that the information is accurate & verifiable if the facility serves a population equivalent of 5,000 people or more.			
GENERA	LINFORMATION				
8	252:515-43-3	 Feedstock types for composting facilities: (1) Type 1. Yard trimmings, wood chips, woody materials, crop residues, hay, cotton gin waste, additives, & biofilters. (2) Type 2. Source separated organics, shredded paper, cardboard, white paper, newspapers, napkins, and other paper products and bulking agents. (3) Type 3. Biosolids, food processing residuals, oils, fats, and greases. (4) Type 4. Mixed organics and commercial waste. 			
9	252:515-43-4	Composting facility classes: Class I. Facilities that compost Type 1 feedstock, including yard waste composting facilities. Class II. Facilities that compost Type 2 feedstock and may contain Type 1 feedstock. Receive less than 100 tons or 200 cubic yards of material per year. Class III. Facilities that compost Type 3 feedstock and facilities that receive greater than or equal to 100 tons or 200 cubic yards of material per year of Type I and Type II feedstock. Class IV. Facilities that compost Type 4 feedstock and may include Type 1, Type 2, and Type 3 feedstocks.			

ITEM #	State or Federal Regulations Statutes or DEQ Rules (OAC) or Guidelines*	GENERAL DESCRIPTION	Admin Complete	Technically Complete	Remarks
10	252:515-3-36(a)(1)	Owner/ operators name, mailing address, and phone number.			
11	252:515-3-36(a)(2)	Facility Name and Type , physical address, phone number			
12	252:515-3-36(a)(3)	Disclosure statement in accordance with OAC 252:515-3-31(g). Form provided by DEQ.			
13	252:515-3-36(a)(4) & (a)(5)	Legal description by metes and bounds of proposed permit boundary and waste disposal areas. To include latitude, and longitude of all corners of the proposed permit boundary and processing area.			
14	252:515-3-36(a)(6) & 3-52	Location: Both physical and mailing addresses; and location with respect to nearest town or city as shown on a general location map.			
15	252:515-3-36(a)(7); 43-57 & 43-58	Operations: Description of all processing, storage and proposed disposal operations and units.			
16	252:515-3-36(a)(8) & 43-52	Waste: Description of anticipated feedstocks including type, source, & anticipated daily volumes.			
17	252:515-3-36(a)(9)	Names of municipalities and/or counties in service area.			
18	252:515-3-36(a)(10)	Estimated population served.			
19	252:515-3-36(a)(11)	Types of road construction and materials for all access roads ensuring passable during inclement weather.			
20	252:515-3-36(a)(12)	List of anticipated heavy equipment to be used in the operation.			
21	252:515-3-36(a)(13) & 3-51 to 3-57	Maps and drawings required by Part 5 of Subchapter 3.			
22	252:515-3-36(a)(14); 5-31; 5-32 43-35; 43-57; 43-71; 43- 72; 43-73; & 43-91	Data, plans and specifications (as applicable) for: a demonstration showing compliance with location restrictions; an operational plan; a stormwater management plan; a closure plan; a plan for aesthetic enhancement, and a groundwater monitoring plan.			

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	DEQ Rules (OAC) or Guidelines*				
23	252:515-3-36(a)(15) & 43-35	Establish financial assurance, if applicable.			
24	252:515-3-37	Aesthetic Enhancement: Applications shall include plans to enhance the visual harmony of the new facility with the surrounding area, and reduce the transmission of dust and noise from the facility. Such plans may include placement of berms, fences, shrubbery, trees, or other such materials to achieve the desired result.			
MAPS	AND DRAWINGS				
25	252:515-3-51(a)(1), (b) , (c), & (e)	The maps and designs identified in this Part shall be submitted with permit applications in the sequence identified for all new composting facilities. The permit application will be considered administratively incomplete if any maps or drawings submitted are not legible. All maps prepared as part of a permit application at a scale of one inch equals one hundred feet $(1'' = 100')$. An alternative scale may be used with the approval of the DEQ.			
26	252:515-3-51(f)	Map details. All maps shall show as a minimum, legend, title, north arrow, permit boundary, buffer zone, and boundaries of processing areas. If applicable, the locations of groundwater monitoring wells shall be identified.			
27	252:515-3-52	General location map. The permit application shall include a county highway map published by the Oklahoma Department of Transportation showing the facility location and any airports within six miles of the facility.			
28	252:515-3-53	Flood Plain Map. A flood plain map from a source approved by DEQ (e.g., FEMA Flood Insurance Rate Map) depicting the limits and elevations of any 100- year flood plain on or within one mile of the permit boundary.			

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29	252:515-3-54	Quadrangle topographic map: The permit application shall include an original U.S. Geological Survey 7.5 minute series topographic quadrangle map. The quadrangle topographic map shall clearly depict the location of the facility permit boundaries and any of the following within one mile of the facility: access routes, homes and buildings, public water and wastewater collection, treatment, receiving waters and surface variations, and water wells, including private and municipal, potable and irrigation water within one mile of the facility.			
30	252:515-3-55	Existing contour map: The permit application shall include a constructed map showing the topographic contours prior to any operations at the facility. The contour interval on the map shall not be greater than two feet. The existing contour map shall show the location and quantities of surface drainage entering and exiting the facility.			
31	252:515-3-56	 Site map: (a) Required map: The permit application shall include a site map, which may be the existing contour map. (b) Required details: The site map shall show the following, as applicable to the facility: (1) the dimensions of the <u>permit boundary</u> as indicated by the legal description; (2) the receiving, processing, storage, and disposal areas; (3) <u>buffer zones</u>; (4) the surface drainage, including location of diversion ditches, dikes, dams, pits, ponds, lagoons, berms, terraces, and other relevant information; (5) the location of fencing and gates, utility lines, pipelines, and easements; (6) the access roads into and on the site; (7) employee and equipment shelters; and, if applicable, (8) the locations and surface elevations of each borehole, monitor well, test well, monitoring site, test pit, sampling site and permanent benchmarks. 			
32	252:515-3-57; 43-71; 43- 72; & 43-73.	Design drawings: The permit application shall include, as necessary, design drawings and specifications for: receiving, processing, storage, and disposal areas and any other design drawings or specifications necessary to describe the proposed activities and meet the design criteria of 515- 43-71, 72, and 73.			

ITEM #	State or Federal Regulations Statutes or DEQ Rules (OAC) or Guidelines*	GENERAL DESCRIPTION	Admin Complete	Technically Complete	Remarks
LOCA	TION STANDARDS	The following location restrictions are to be addressed (OAC 252:515 Subchapter 5 Part 3 and Subchapter 43 Part 7):			
33	252:515-5-31(a)	Scenic Rivers: Not to be located within the drainage basin of any river designated under Oklahoma Scenic Rivers Commission (OSRC) Act unless statement of no adverse effect is obtained from OSRC or Oklahoma Tourism & Recreation Department and submitted to DEQ.			
34	252:515-5-31(b)	Recreation/Preservation Areas: Facility shall not to be located within one-half (1/2) mile of area dedicated & managed for public recreation or natural preservation by any governmental agency. Exceptions granted if application includes statement from appropriate agency that proposed site is not expected to adversely affect recreation or natural area.			
35	252:515-5-31(c)	Endangered & Threatened Species: Statement required from Oklahoma Department of Wildlife (ODWC) and Oklahoma Biological Survey (OBS) concerning endangered or threatened wildlife or plant species within one (1) mile of proposed site. If exist, impact statement required and mitigation plan approved by ODWC or OBS to be submitted to DEQ.			
36	252:515-5-32(a) & 252:515-3-53	100 Year Flood Plain and map: No waste management or disposal areas shall be located within the 100 Year Flood Plain. 100 year flood level & boundaries to be furnished in application. DEQ may grant a variance provided subsequent redefinition of the flood plain does not include the waste management or disposal areas.			
37	252:515-5-32(b)	Public Water Supply: Facility shall not to be located within one (1) mile up-gradient of a public water supply surface water intake or one year time of travel of a public water supply well. Wellhead delineation to be performed and submitted with the application.			
38	252:515-5-32(c)	Wellhead Protection Area: If any new waste management or disposal areas will be located within two miles of a public water supply well, a wellhead protection area shall be identified and submitted to the DEQ.			

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39	252:515-5-32(d)	Wetlands: Facility shall not to be located in wetlands. Letter required from Oklahoma Conservation Commission (OCC) stating proposed site not located in wetlands. Exception upon demonstration that all of the following can be made and verified: Rebuttable presumption, No harm, No degradation, No net loss, and Sufficient information is available.			
OPERATI	ONAL STANDARDS				
40	252:515-43-52	Acceptable composting materials: Materials to be composted shall be specified in the permit or other authorization and shall be classified as Type 1, 2, 3, or 4 feedstock. All feedstock material should be measured, by weight or volume, and recorded in the operating record.			
41	252:515-43-53	Prohibited materials: Materials specified in 252:515-19-31 (a) through (c) and any other wastes not allowed by the permit or plan are prohibited for receipt at all composting facilities. Class III and IV composting facilities shall implement a Waste Exclusion Plan (WEP) meeting the requirements of Subchapter 29.			
42	252:515-43-54	Non- compostable and other waste: A receptacle shall be maintained for disposal of both refuse generated and unacceptable waste received at the site.			
43	252:515-19-38(a)	Waters of the state: Solid waste shall not be placed or allowed to enter, accidentally or otherwise, waters that communicate with waters of the state located outside of the permit boundary.			
44	252:515-43-55(a)	Facilities may accept Class A biosolids if authorized by their permit.			
45	252:515-43-55(b)	Facilities that intend to compost Class B biosolids shall comply with all applicable state and federal regulations regarding sludge management at OAC 252:606-8, and shall have all necessary permits and approvals from the Water Quality Division.			
46	252:515-43-56	Bulking: Feedstock with free liquid shall be mixed with drier feedstocks, bulking material or compost so that the liquid is promptly absorbed and not allowed to flow as free liquid from the compost piles or windrows.			

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47	252:515-43-57	Operations Plan : All applications for a composting facility shall include an operations plan that describes how compliance with operating criteria will be met. The Operations Plan shall include measures to control nuisance odors, vectors, fires, contact water and stormwater.			
48	252:515-43-58(a) 252:515-19-32	Access Control: Artificial and/ or natural barriers shall be used to discourage unauthorized traffic and uncontrolled dumping.			
49	252:515-43-58(b)	Signage: The facility shall maintain a sign at the entrance of the facility that lists the name of the facility, permit number, facility class, hours of operation, and emergency contact information.			
50	252:515-43-58(c) 252:515-19-38(b)	Buffer zones: All composting facilities shall be designed and maintained with a waste free buffer zone at least 50 feet in width between all feedstock and adjacent property. The buffer zone shall be contained within the permit boundary described in the permit application.			
51	252:515-43-58(d)	Receiving Area: Unloading of material shall be restricted to a specific area and controlled to minimize traffic congestion, facilitate the handling of materials, and minimize the danger to personnel.			
52	252:515-43-58(e)	A designated processing area shall be maintained. Contact water shall be directed to containment and processing system.			
53	252:515-43-58(f)	Storage of finished compost on site is limited to 12 months of production unless otherwise approved by DEQ.			
54	252:515-43-58(g), (h) & (i)	The composting area shall be maintained and repaired as needed. An area for curing of finished compost shall be maintained. Finished compost shall cure for a minimum of two weeks before distribution and use. Facilities that propose to recirculate contact water shall submit a plan for DEQ approval. Composting operations must take place on an all- weather pad.			
55	252:515-43-59	Processing time: Facilities must manage feedstock in a timeframe that minimizes odors, release of feedstock liquids, fire, and scavenging by vectors. All putrescible feedstock must be processed within 48 hours of receipt. By the end of each operating day the feedstock must be processed or covered.			

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56	252:515-43-60 (1)	Windrow composting: The compost material must be maintained at a minimum average temperature of 55 °C (131° F) for 15 days or longer.			
57	252:515-43-60 (2)	Aerated static pile or in vessel composting: Material maintained at a minimum average temperature of 55°C (131°F) for three continuous days, followed by 14 days with a minimum temperature of 45°C (113°F).			
58	252:515-43-60 (3)	Passive pile: Material maintained below 75°C (170°F) for active composting period.			
59	252:515-43-61	Windrow turning: Windrows shall be turned a minimum of 5 turnings in 15 days or more frequently as needed to maintain aerobic conditions or specified temperatures.			
60	252:515-43-62	Procedure for monitoring internal temperature and moisture shall be provided in the operations plan, specifying the ranges for the composting cycle and contingencies for not meeting the specified ranges. Internal temperature and moisture monitoring shall be recorded prior to the turning of each windrow every 17 feet at a depth of 20 inches.			
61	252:515-43-63	The composting process shall be considered complete when the internal temperatures remain below 70°F or temperature specified in the Permit.			
62	252:515-43-64	Odor control measures including increasing aeration shall be implemented whenever odors are detectable outside the facility.			
63	252:515-43-65	Operations of an in-vessel, aerated static pile, static pile, and hybrid composting facility shall be defined in the operations plan.			
64	252:515-19-36(b)	Fire Protection: Open burning of solid waste is prohibited.			
65	252:515-19-36(c)	Dust control: Measures to be taken to control dust. Narrative of control measures to be included.			
66	252:515-19-37	Disease vector control measures using techniques appropriate for the protection of human health and the environment. Narrative of control measures to be included.			

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DESIG	GN STANDARDS				
67	252:515-43-71 252:515-43-58(i)	Class I and Class II design standards: must meet location restrictions listed in OAC 252:515 Subchapter 5, Part 3. Contact water must be segregated and directed to containment. Composting operation shall take place on an all-weather composting pad that prevents ponding, reliably transmits any free liquid present to containment, and prevents conditions that could contribute to a release to the environment.			
68	252:515-43-72(1) & 252:515-43-58(i)	Class III design standards: must meet Class I and Class II design standards. Composting activities must take place on an all-weather pad meeting the following criteria: 5 feet or more separation from the top of groundwater; soils within 5 feet must have a hydraulic conductivity of 1×10^{-5} cm/sec or less; or be a constructed surface. An all-weather pad with a sufficient slope to direct contact water should be used.			
69	252:515-43-72(2)&(3)	For Class III composting facilities, windrows shall be constructed perpendicular to the slopes. The facility should have all weather access roads.			
70	252:515-43-73	Class IV composting facilities shall meet the design standards of Class III facilities and meet the location restriction outlined in 252:515-5-52(e)-Airports; and have a working surface with a hydraulic conductivity of 1X 10 ⁻⁷ or less.			
71	252:515-5-52(e)(2)	The airport demonstration and notification requirements apply to Class IV design standards.			

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WATE	R MANAGEMENT	The entire facility site shall be constructed so as to minimize runoff. Plans and specifications regarding the design, construction & maintenance of run-on/run-off control systems & handling of contact water as outlined in 252:515-17-2 are required. In addition, facilities shall be designed, constructed, and operated in a manner that will prevent and avoid contamination of groundwater.			
72	252:515-43-58(e) &252:515-43-71(2)	Contact water must be segregated and directed to containment, recycling, and / or treatment system sized to handle a minimum 24 hour, 25 year storm event. For Class I - IV composting facilities, stormwater shall be managed in compliance with Subchapter 17.			
73	252:515-43-71(3)	Stormwater run-on / run-off control. The composting area shall be designed, constructed, and maintained to prevent the run-on / run-off of stormwater and be in compliance with Subchapter 17 including OPDES permitting, if required by OAC 252:606.			
-	OUNDWATER ONITORING	252:515-43-91: Class III and IV composting facilities shall submit a groundwater monitoring program to DEQ for review and approval consistent with requirements in OAC 252:515 Subchapter 9, as applicable.			
74	252:515-43-91(a)	Groundwater monitoring program shall include a sample analysis plan; establish background water quality; perform detection monitoring; reporting results; and conduct assessment monitoring and corrective action, if necessary.			
75	252:515-9-3(b)	Groundwater monitoring program requirements. At a minimum monitoring shall include: pH, chemical oxygen demand, specific conductivity, chloride, sulfate, calcium, magnesium, nitrates, sodium, carbonates, and potassium.			
76	252:515-43-91 (b) & 252:515-9-3(c)	Filtering prohibition: Groundwater samples shall not be filtered in the field or in the lab prior to analysis.			
77	252:515-9-4	Monitor Well Location: Wells are to be located on land owned or leased by the owner of the facility & placed no more than 150 meters (492.13 feet) from the waste management unit boundary. Number, spacing, and depths of monitoring wells to be based on site-specific technical information.			

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ITEM #	State or Federal Regulations Statutes or DEQ Rules (OAC) or Guidelines*	GENERAL DESCRIPTION	Admin Complete	Technically Complete	Remarks
78	252:515-9-5	Monitor Wells Required: A minimum of three (3) monitor wells are required to yield samples from the uppermost aquifer. At least one (1) monitor well to be located up- gradient and at least two (2) monitor wells hydraulically down-gradient of the facility based on the actual potentiometric contour map.			
79	252:515-9-6 252:515-9-7	Design & Construction: Wells must be constructed and / or plugged as set forth in OAC 785: 35-11. All monitor wells must be maintained and operated so that design specifications are met throughout the life of the monitoring program.			
COMPOST TESTING STANDARDS					
80	252:515-43-111	Class III and IV facilities must include a testing protocol for the finished compost material.			
RECORDKEEPING REQUIREMENTS		The following information is to be submitted to DEQ and a copy retained in the operating record of the facility according to OAC 252:515-19-40. The operating record is to be maintained until DEQ has approved closure of the facility.			
81	252:515-19-40	General: Facility shall submit to DEQ & maintain in the operating records any location restriction demonstrations, daily operational records, inspection records, monthly and annual reports, documentation & analyses demonstrating the nonhazardous classification of wastes received, monitoring or testing data required, closure plans, and any cost estimates & financial assurance documentation. Such records shall be maintained until DEQ approves the facility to cease maintenance.			
82	252:515-43-66	Recordkeeping: Daily logs shall be maintained that identify the weight or volume of incoming feedstocks and outgoing compost, windrow internal temperatures, and a record of which windrows were turned.			
83	252:515-43-34	Reporting requirements: Class III and IV composting facilities are required to submit monthly reports including the amount of total feedstock material received; amount of non-compostable material shipped for disposal and the name of the permitted site receiving the material; and amount of composting material on site.			

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84	252:515-43-34 (2)	Class III & IV facilities meeting the definition of a commercial composting facility in 27A O.S. § 2-10-103 must submit fees. Fees shall be collected and remitted to DEQ quarterly in accordance with 27A O.S. § 2-10-802(B). Fees shall be reported in a format prescribed by DEQ. A commercial composting facility: a) is not owned or operated by a governmental entity, b) receives 100 tons or more per year of feedstock, any part of which is food waste, and c) principally accepts non-agricultural feedstock.			
CLOSURE/ POST- CLOSURE					
85	252:515-25-32	Closure Plan: Identification of site-specific closure activities with detailed narrative descriptions of how each is expected to be performed, a schedule for completion, and estimated cost of each activity. The itemized written cost estimate must assume the cost of hiring a third party to complete closure activities.			
86	252:515-25-51(c)	Composting facilities shall conduct post- closure monitoring and care for a period specified by the DEQ if it is determined that post closure monitoring and care are necessary due to soil or surface groundwater contamination from activities performed at the site facility.			
FINANCIAL ASSURANCE		Class III and IV are required to have financial assurance as specified in OAC 252:515-27.			
87	252:515-43-35(b)	Financial Assurance will be established based on the closure cost estimate in the closure plan for removal and disposal, by a third party, of the maximum amount of feedstock and product material the site is capable of storing, plus removal of equipment, temporary buildings, and establish permanent vegetation at the facility.			
88	252:515-27	Financial Assurance: A non-negotiable instrument guaranteeing sufficient funds for the adequate completion of closure upon the failure of the permittee to fully complete performance according to the terms of the permit and applicable law. Types of financial assurance considered acceptable are trust funds, surety bond guaranteeing payment or performance, letter of credit, insurance, certificate of deposit, cash or other state approved mechanism meeting the criteria specified in 252:515-27.			