Guideline for Preparing a Facility Operating Plan

for Construction and Demolition Landfills in Kansas

April 16, 2019

This document explains the information that owners and operators of construction and demolition landfills (C&D) need to include in the facility operating plan (FOP) and includes a template that may be used to develop the FOP.

Please be aware that the following documents should *not* be included in the FOP because they are independent of the FOP and are to be submitted under a separate cover:

Closure and Post-Closure Plan. Submit this plan, including drawings and text, as a separate document. K.A.R. 28-29-12 and Form DS135

Restrictive Covenant. Consult your KDHE-BWM Permit Manager before preparing this document. K.A.R. 28-29-325(a)(7) and K.A.R. 28-29-20

Financial Information. Discuss necessary documentation with the KDHE-BWM financial assurance auditor. K.A.R. 28- 29-325(a)(8)

Construction Quality Assurance (CQA) plan

FOP Format

Title page for the FOP that includes the name of the facility, permit number, and date **Table of contents** that lists the page number of each required topic **The body** of the FOP will contain the information that is required in the plan

FOP Requirements

Operating conditions. Discuss the operating schedule and identify the operating hours of the facility. State how trespassing and unauthorized dumping will be prevented by access control. State and illustrate, with a typical section, how all-weather access roads are maintained for the site. For more information on access control, see K.A.R. 28-29-308(e) and BWM Policy 2012-P1.

Origin of waste. Discuss where incoming waste is generated with regard to county and state boundaries and if waste generated out of county or state is accepted. Also discuss the composition of the waste (e.g. C&D waste, clean rubble, untreated wood). For more information on origin of waste see K.A.R. 28-29-300 and K.S.A 65-3402.

Daily volume. Provide the approximate volume of waste received by the facility. Discuss how the facility will document accepted waste. Discuss how tonnage is measured (e.g. scales, volume estimates). For more information on tonnage reporting and fee payments see K.A.R. 28-29-308(i), 28-29-85(c), BWM Policy 98-03, and Policy 10-02.

Waste screening. Describe in detail the procedures for screening incoming waste including the location where screening will occur. The landfill operator will screen all C&D waste before disposal at the facility. For more information on screening requirements, see K.A.R. 28-29-23(s), 28-29-308(f), and BWM Policy 07-02.

Storing and removing non-C&D waste. Describe the procedures for storing and removing all non-C&D waste for recycling or for disposal at a site permitted to accept the non-C&D waste. Include where and for how long the non-C&D waste will be stored on-site prior to removal from the facility as well as the name and address of where the non-C&D waste will be recycled and disposed of, as applicable. For more information on storage and removal of non-C&D waste, see K.A.R. 28-29-308(f).

Salvaging. If salvaging will occur on-site, describe the material(s) that will be salvaged, where the salvaging will occur, where salvageable material(s) will be stored on-site, and the times in which

material(s) will be removed from site. Provide the name and address of where the waste will be recycled and disposed of, as applicable. For more information on salvaging see K.A.R. 28-29-23(l) and K.A.R. 28-29-108(p).

Scavenging. Scavenging is prohibited. For more information on scavenging see K.A.R. 28-29-108(p)(4).

Appliances. Describe the handling of appliances that will be disposed of at the landfill. If any appliances will be recycled, this management practice should be discussed in the salvaging section of the operating plan. For more information on the management of appliances ("white goods") see BWM TGD SW-1995-G2.

Disposal of asbestos. Describe the handling of non-friable asbestos that will be disposed of at the C&D landfill. *Friable asbestos may not be disposed of at any C&D landfill.* In order to minimize the likelihood of non-friable asbestos becoming friable, KDHE recommends that non-friable asbestos be wetted, wrapped, and then covered immediately at the landfill. See BWM TGD SW-1994-G2 for additional information regarding the disposal of asbestos.

Waste placement and compaction. Describe the method and procedures for placement of waste at the working face and the compaction of the waste in the landfill. For more information on placement and compaction requirements see K.A.R. 28-29-308(g) and (h).

Safety procedures. Describe in detail the specific safety procedures that will be followed by employees and the general public at the landfill. Describe employee training, including yearly FOP training. For more information on safety procedures see TGD SW-2005-G1.

Cover application. Describe the material, thickness, and frequency of application of cover, alternative cover, and intermediate cover application. Describe any approved alternative cover. For more information on cover application see K.A.R. 28-29-308(k).

Contact water management.

Describe the system in place for handling contact water at the facility

Engineer drawings – Have an engineer provide a typical plan, cross section, and berm sizes that illustrate how contact water will be retained within the facility. For example illustrations, see attachment one of the operating plan template. For more information on contact water management see K.A.R. 28-29-308(d).

Hazardous and explosive gas control. Determine if the landfill is subject to additional landfill gas control requirements, this is done through the specifications in K.A.R. 28-29-330. If additional requirements are necessary, a landfill gas monitoring and control plan is to be included as an attachment. For more information regarding hazardous and explosive gas control see K.A.R. 28-29-300 through 333.

Odor, dust, and litter. Describe the procedures that will be used to minimize odors, litter, and dust at the disposal unit and on haul roads. For more information on dust suppression and litter control see K.A.R. 28-29-308(a).

Storm water control. Describe the facility's system of managing storm water. Include how the flow of storm water will be diverted away from the active area to minimize contact water and how the flow of storm water will be slowed to minimize erosion. For more information on storm water control see K.A.R. 28-29-308(d).

Utilities. Describe the facility's utilities including heat, power, water, communication equipment, and sanitary facilities.

Machinery and Equipment. List the equipment the facility will use and its design capacity.

Contingency plan. Develop a contingency plan that describes the following:

- 1. Explain the facilities fire and spill emergency procedures. See K.A.R. 28-29-308(c); and
- 2. Other unexpected suspension of operations, including weather, equipment breakdown and personnel emergencies.

Closure. Describe when and why the operator would suspend the receipt of waste at the facility, including the following:

- 1. Temporary situations;
- 2. Final situations due to conditions of the permit or attainment of final elevation.

Facility development and waste placement progression.

- 1. Provide a drawing that delineates and numerates phases in the landfill development sequence. The purpose of the drawing is to optimize the filling of units or cells which will decrease the facility's long-term costs. Also, the drawing can provide specific guidance to equipment operators, so they may operate efficiently.
- 2. Describe the approach of facility development and the waste placement progression in individual units. The following topics should be included:
 - a. Describe the operation scheme: continuous vs. trench fill. Illustrate and explain how future disposal area will be developed during operations.
 - b. Discuss stockpiling of various types of soil for use as 120-day (or 2000 ton) and final cover.
 - c. Discuss access, slopes, berms, drainage, and safety. Consider the location of access roads, stockpiles, and haul roads in order to provide the most efficient operation.
- 3. Illustrate and explain how the horizontal and vertical limits of waste disposal will be managed within disposal areas that have been approved by CQA reports and the BWM permit manager. Buffers are not to be encroached upon. For regulations regarding survey controls see K.A.R. 28-29-108(l).

Facility capacity. Provide the proposed capacity of the facility. Make sure it matches the capacity reported in the design plans and engineering report.

Expected facility life. Provide the expected life in years of the landfill. Make sure it matches the life recorded in the design plans and engineering report.

Recordkeeping. Describe where records will be kept.

The following records must be retained for a minimum of five years:

- 1. Location restriction demonstrations
- 2. For closed cells, closure and post-closure care plans and any monitoring testing, or analytical data
- 3. Cost estimates and financial assurance documentation
- 4. A copy of the current facility permit, including all approved plans and specifications.

Attachments. Area for all documents relative to the FOP. Include the burn area acceptance if permitted and the landfill gas monitoring and control plan as necessary.