

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 100. AIR POLLUTION CONTROL**

Before the Air Quality Advisory Council on October 20, 2021 and January 19, 2022
Before the Environmental Quality Board on February 18, 2022

RULE IMPACT STATEMENT

Subchapter 47. Control of Emissions from Existing Municipal Solid Waste Landfills

252:100-47-2 [AMENDED]

252:100-47-3 [AMENDED]

252:100-47-5 [AMENDED]

252:100-47-6 [AMENDED]

252:100-47-7 [AMENDED]

252:100-47-8 [AMENDED]

252:100-47-9 [AMENDED]

252:100-47-10 [AMENDED]

252:100-47-11 [AMENDED]

252:100-47-12 [AMENDED]

252:100-47-13 [AMENDED]

252:100-47-14 [AMENDED]

DESCRIPTION: The Department of Environmental Quality (Department or DEQ) proposes to amend OAC 252:100, Subchapter 47, Control of Emissions from Existing Municipal Solid Waste Landfills. The gist of the proposed rule is to implement the provisions of 40 C.F.R. Part 60, Subpart Cf, “Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills.” Upon promulgation, the revised Subchapter 47 will be incorporated into Oklahoma’s revised State 111(d) Plan. The proposed rule changes affect municipal solid waste (MSW) landfills that commenced construction, modification, or reconstruction before July 17, 2014, and accepted waste after November 8, 1987, including closed landfills. Landfill gas collection and control systems (GCCS) will be required for landfills with design capacities of at least 2.5 million megagrams and 2.5 million cubic meters that have estimated emissions of at least 34 megagrams per year of non-methane organic compounds (NMOC). The previous NMOC threshold to install a control system was 50 megagrams per year. Currently, EPA is implementing the emission guidelines for existing MSW landfills with a Federal Plan under 40 C.F.R. Part 62, Subpart OOO.

CLASSES OF PERSONS AFFECTED: The owners and operators of Oklahoma MSW landfills that commenced construction, modification, or reconstruction on or before July 17, 2014, will be affected.

CLASSES OF PERSONS WHO WILL BEAR COSTS: The costs will be borne by the owners and operators of existing Oklahoma MSW landfills that commenced construction, modification, or reconstruction on or before July 17, 2014.

INFORMATION ON COST IMPACTS FROM PRIVATE/PUBLIC ENTITIES: The Department has received no information on cost impacts from private or public entities related to this rulemaking as of this date.

CLASSES OF PERSONS BENEFITTED: The citizens of Oklahoma will benefit from the reduction in emissions whether the requirements are implemented by the state or by EPA. By ensuring that the updated state rule is consistent with federal guidelines, the Department will be able to implement and enforce the requirements rather than EPA, which will benefit owners and operators of MSW landfills.

PROBABLE ECONOMIC IMPACT ON AFFECTED CLASSES OF PERSONS: The owners and operators of landfills subject to this rulemaking are expected to experience the same costs associated with compliance as they currently are experiencing when complying with the Federal Plan.

PROBABLE ECONOMIC IMPACT ON POLITICAL SUBDIVISIONS: Landfills may be operated by private or public entities. In Oklahoma, out of the 17 landfills covered by the Federal Plan that have design capacities in excess of 2.5 million megagrams, six are operated by public entities. Two of these publicly-owned facilities are already equipped with active landfill GCCS. Two additional publicly-owned facilities have design capacities below 2.5 million cubic megagrams. This rulemaking may require additional Oklahoma MSW landfills to install a GCCS.

POTENTIAL ADVERSE EFFECT ON SMALL BUSINESS: The landfills affected by this proposed rule are not expected to be operated by small businesses as defined by Oklahoma Statutes and therefore there are no potential direct adverse effects on small businesses. The indirect cost impacts to small businesses are expected to be an incremental increase in landfill disposal costs to all landfill customers, including small businesses, due to the landfill's costs of compliance with the federal requirements. However, in the federal rulemaking associated with EPA's emission guidelines publication, EPA concluded that increases in tipping fees are likely to be minimal.

LISTING OF ALL FEE CHANGES, INCLUDING A SEPARATE JUSTIFICATION FOR EACH FEE CHANGE: The Department is not proposing any fee changes in this rule.

PROBABLE COSTS AND BENEFITS TO DEQ TO IMPLEMENT AND ENFORCE: Additional costs to the Department to enforce or implement the proposed rule changes are anticipated to be minimal. The Department will benefit from the proposal because it will allow state implementation and enforcement of these requirements.

PROBABLE COSTS AND BENEFITS TO OTHER AGENCIES TO IMPLEMENT AND ENFORCE: There are none. No other agencies will be implementing or enforcing these regulations.

SOURCE OF REVENUE TO BE USED TO IMPLEMENT AND ENFORCE RULE: Federal grants and fees will continue to be used as the sources of revenue to implement and enforce the rule.

PROJECTED NET LOSS OR GAIN IN REVENUES FOR DEQ AND/OR OTHER AGENCIES, IF IT CAN BE PROJECTED: The Department does not anticipate any net losses or gains associated with the proposed rule. There may be a slight decrease in inventory fees due to additional landfills installing landfill GCCS with commensurate reductions in emissions. However, those reductions, and the impact on inventory fees are not expected to represent a significant decrease when compared with current operations.

COOPERATION OF POLITICAL SUBDIVISIONS REQUIRED TO IMPLEMENT OR ENFORCE RULE: None. Affected municipalities, counties, and public trusts will be required to comply with this rulemaking. The Department will implement, enforce, and administer these proposed rule changes.

EXPLANATION OF THE MEASURES THE DEQ TOOK TO MINIMIZE COMPLIANCE COSTS: The proposed rule changes are in conformity with the emission guidelines mandated by EPA, which represent the minimum requirements necessary to protect the environment and the public's health and safety, according to the current federal policy. Therefore, all compliance costs associated with the proposed rule changes also represent the minimum costs necessary to protect the environment and the public's health and safety.

DETERMINATION OF WHETHER THERE ARE LESS COSTLY OR NONREGULATORY OR LESS INTRUSIVE METHODS OF ACHIEVING THE PURPOSE OF THE PROPOSED RULE: There are none. EPA, acting under the authority of Section 111(d) of the federal Clean Air Act, promulgated the emission guidelines for MSW landfills, which required states to adopt the requirements into state rules and implement them through State Plans. Therefore, adoption of these proposed rule changes into Oklahoma's State 111(d) Plan is necessary in order to give Oklahoma the authority to enforce these federally mandated requirements. EPA will continue implementing its Federal Plan until Oklahoma updates its state rules and revises its State Plan.

DETERMINATION OF THE EFFECT ON PUBLIC HEALTH, SAFETY AND ENVIRONMENT: The proposed rule changes will have a positive effect on public health, safety, and the environment, by requiring more landfills to install a landfill GCCS. The GCCS will reduce methane emissions and NMOC emissions, which contain Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs).

IF THE PROPOSED RULE IS DESIGNED TO REDUCE SIGNIFICANT RISKS TO THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT, EXPLANATION OF THE NATURE OF THE RISK AND TO WHAT EXTENT THE PROPOSED RULE WILL REDUCE THE RISK: Landfill gas is a collection of air pollutants, including methane, a greenhouse gas, and NMOCs. Methane is harmful to the environment because its greenhouse gas potential is 28-36 times greater than that of carbon dioxide (CO₂) and it can remain in the atmosphere for up to 12 years. The NMOC portion of landfill gas can contain HAPs and VOCs. HAPs include a number of compounds that can cause cancer. VOC emissions are precursors to both fine particulate matter (PM_{2.5}) and ozone, two pollutants that have significant health effects and are regulated by National Ambient Air Quality Standards. EPA estimated that nationally, 93 additional landfills will be required to install landfill GCCS resulting in reductions of 1,810

megagrams (1,995 tons) of NMOC and 0.29 million megagrams (0.32 million tons) of methane by 2025. Oklahoma should expect proportionate emission reductions in the state.

DETERMINATION OF ANY DETRIMENTAL EFFECT ON THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT IF THE PROPOSED RULE IS NOT IMPLEMENTED:

Adoption of these proposed rule changes into Oklahoma's State 111(d) Plan is necessary to give Oklahoma the legal authority to enforce these federally mandated requirements. If the rule is not revised, EPA will continue to implement its Federal Plan for Oklahoma.

PROBABLE QUANTITATIVE AND QUALITATIVE IMPACT ON BUSINESS ENTITIES (INCLUDE QUANTIFIABLE DATA WHERE POSSIBLE):

The Federal Plan lists 31 existing MSW landfills in Oklahoma that are not under tribal/EPA jurisdiction. It is possible additional facilities will be subject to this rule. EPA estimates at least 17 of the 31 landfills exceed a design capacity of 2.5 million megagrams. Seven of these landfills are already equipped with a GCCS, including one landfill that has identified NMOC emissions within the 34-50 megagrams per year range. Another landfill has NMOC emissions just under 34 megagrams per year and may be impacted by the proposed rule in the future. These 17 landfills, whether active or closed, are already required to obtain Part 70 air quality permits under the current version of this rule. For the many facilities that are still below 2.5 million megagrams or 2.5 million cubic meters in design capacity, there is no further requirement besides the design capacity report. Regulatory compliance costs may include: capital costs; operation and maintenance costs; and costs for sampling, monitoring, inspection, recordkeeping, and reporting. EPA estimated the costs to affected landfills in the federal rulemaking. Since the Federal Plan is in place and this proposed rule only implements the federal requirements, no additional state compliance costs are expected. Landfills which install a collection and control system may be required to increase or modify their financial assurance as provided in OAC 252:515-27. Construction permit fees will be required for those facilities that must install a GCCS.

THIS RULE IMPACT STATEMENT WAS PREPARED ON: September 15, 2021

MODIFIED ON: December 1, 2021