

Utilities Section Newsletter

League of Nebraska Municipalities

October 2011

EPA's Engines Regulations

Summary of NESHAP Subpart ZZZZ

Article by
Melissa Ellis,
NDEQ Air Toxics Coordinator

In 2010, EPA finalized regulations affecting numerous engines across the nation. These regulations are the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ for Reciprocating Internal Combustion Engines. While this rule has been around since 2004, it did not affect a large number of engines until EPA amended the regulations in 2010. The 2010 amendments established requirements for existing compression ignition and spark ignition engines at area sources and engines less than 500 horsepower (HP) at major sources. A major source is one that has facility-wide potential emissions above 10 tons per year of a single hazardous air pollutant (HAP) or 25 tons per year of combined HAPs. Area sources are any sources that emit less than the major source threshold. Under the amendments, an "existing engine" is an engine in operation before June 12, 2006.

Under this regulation, engines are further classified as either

non-emergency or emergency engines. Emergency engines are engines limited to operating during emergency situations or during required testing and maintenance. Engines used for peak shaving cannot be classified as emergency engines. Emergency engines are allowed to operate 15 hours per year for demand response situations.

The 2010 amendments established work practice requirements for the following existing engines:

- Emergency engines:
 - At an area source*
*Does not include emergency engines located at residential, commercial, or institutional area sources
 - ≤ 500 HP at a major source
- Black start engines
- Non-emergency engines:
 - Compression ignition engines:
 - ≤ 300 HP at an area source
 - ≤ 100 HP at a major

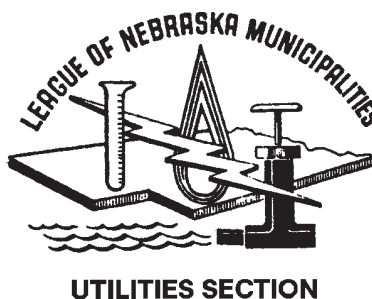
source

- Spark ignition engines:
 - At an area source:
 - Burning landfill or digester gas
 - Two-stroke lean burn
 - Four-stroke lean or rich burn ≤ 500 HP
 - Four-stroke lean or rich burn > 500 HP and operating ≤ 24 hours per year
 - ≤ 100 HP at a major source

Sources with engines subject to the work practice requirements must conduct scheduled maintenance, keep records for maintenance and malfunctions, and keep

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Thank you!

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Lash Chaffin
Utilities Section Director
Rob Pierce
Utilities Field Representative

EPA's Engines Regulations

Continued from page 1
records of operating hours for emergency engines. There are no notification or reporting requirements for engines subject to the work practice standards.

The 2010 amendments also established emission standards for the following existing engines:

- Non-emergency engines:
 - Compression ignition engines:
 - > 300 HP at an area source
 - > 100 HP at a major source
 - Spark ignition engines:
 - Four-stroke lean or rich burn engines > 500 HP and operating > 24 hours per year at an area source

- > 100 HP and \leq 500 HP at a major source

Sources with engines subject to the numerical emission standards are required to meet carbon monoxide or formaldehyde emission limits or reductions and conduct initial stack testing. Typically, these engines require air pollution controls, such as a catalytic oxidizer, to meet the emission standards. They are also required to have testing conducted on the engine stacks every three years or every 8,760 hours. If the engine operates less than 100 hours per year, stack testing is only required every five years. Sources with engines over 500 HP must continuously monitor their control devices and keep records of all information used to determine

compliance. Compression ignition engines must have a closed crankcase installed. Engines with displacement less than 30 liters per cylinder are required to burn ultra-low sulfur diesel.

Sources with engines subject to the numerical standards must submit initial, compliance status, and intent to test notifications. They are also subject to semi-annual compliance reports. If the engines are used less than 100 hours per year, they are allowed to submit annual reports.

EPA is in the process of reconsidering two aspects of the rule which may affect municipalities. EPA has accepted comment on the amount of hours allowed to operate in demand response

Continued on page 3

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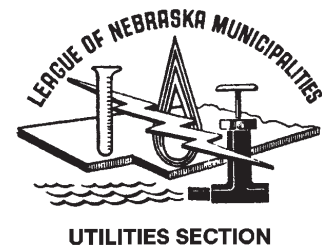
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EPA's Engines Regulations

Continued from page 2
situations. They have recently announced they will reconsider the limitations in the rule for using small engines for peak shaving. More information will be published in the Federal Register soon.

Please see the final rule for all work practice requirements,

emission limits, monitoring, recordkeeping, and notification requirements for each engine type and size. The rule, reconsideration information, forms, and guidance documents can be found on the Nebraska Department of Environmental Quality's (NDEQ) web-

site on the Air Toxics Notebook – Guide to NESHAPs at www.deq.state.ne.us under Focus on Air and Air Toxics Program. Or, you can go to the Subpart ZZZZ page directly at www.deq.state.ne.us/AirToxic.nsf/pages/ZZZZ.

To stay informed of the air regulations, join the NDEQ AirNews

Listserv by sending an email to listserv@listserv.nebraska.gov with SUBSCRIBE DEQ-AirNews (your name) in the body of the message (NOT in the subject line). You can also contact Melissa Ellis, NDEQ Air Toxics Coordinator, at (402) 471-6624 or melissa.ellis@nebraska.gov.

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Nebraska utilities history

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce,
Utilities Field Representative,
LNM

Grant, located in Perkins County, was first settled or founded about three-fourths of a mile north of the present site. In March 1886, the first building was built in Ogalala, then hauled across the prairie to the town site becoming the Myers & Blavelt store. On March 12, 1886, lots were platted with 250 sold for as much as \$100. On May 11, 1886, a post office was established and in 1887, when the Chicago, Burlington and Quincy Railroad came to Perkins County, the settlement soon moved to the rail line. By September 1887, the settlement consisted of about 10 buildings. In 1888, Grant won the county seat in an election with 902 votes to Madrid's 474 and Lisbon's 309. Elsie and Venango had dropped out of the

running early before the ballots were printed. Grant also became an incorporated village that same year. By 1890, the village had three banks, two weekly papers (*Perkins County Sentinel* and *Grant Enterprise*), a lumberyard, millinery, a commercial hotel, hardware store, bakery, a harness maker, real estate office, saloon, meat market, and a blacksmith. During the late 1800s dry spell, the digging of wells was an active business as the owner of a good well could sell water for as much as \$0.50 per barrel. The population in 1890 was somewhere between 315 and 500, depending on which source was quoted. In 1901, the former two-story brick First National Bank building was purchased for use as a courthouse and the population was listed at 182.

By 1910, the population had risen to 358 and a small one-room frame school was used. By the



Grant water tower, 1996 Photo.

1920s, the population increased to 585, streetlights lit the business area and the Grant Telephone Company was operating (1927). A new courthouse was built at a cost of about \$125,000. By 1928, a swimming pool was built and Grant was a member of the League of Nebraska Municipalities. The 1930s saw the population increase to 798 and the Perkins County High School was hold-

Continued on page 5

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Nebraska utilities history

Continued from page 4
ing classes. By 1936, electrical current was supplied by a 180 kilowatt (kW) internal combustion power plant operated by the Western Public Service Company. Population increases were noted from 897 in 1940 to 1,091 in 1950. By 1956, Grant had a fire department with about 27 volunteer firemen, a privately owned/operated airport, and a public owned cemetery maintained from a tax levy. The public sewer system had charges of fifty cents

per month, garbage was collected privately at a rate of fifty cents per month and the publicly owned water plant had a flat rate of \$3 per month. In 1957, bids were received for a new 200,000-gallon elevated steel tank and bids for dismantling the old 60,000-gallon standpipe was estimated at a cost of \$94,000. By 1958, the electrical system was supplied by Consumers Public Power District. Street lighting costs were \$250 per month and the cost of current for pumping water was \$185 per

month. Also in 1958, the airport was in the process of building a \$10,000 runway.

By the 1960s, Grant was a second class city with a population at 1,166 and a new 120,000-gallon swimming pool was under construction as a bond issue was passed for \$49,500. The water rates were still \$3 per month and the cost of pumping water amounted to about \$230 per month. A sewage treatment plant improvement project was un-

Continued on page 6

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Nebraska utilities history

Continued from page 5
 derway (\$22,268) and maintained from a fifty cents sewer charge per month. The electric system was supplied by Consumers Public Power District with a street lighting cost of \$145.43 per month and the cost of current for water pumping at \$230 per month. In 1962, the garbage rates were: resident, fifty cents and businesses, \$1 per month. Water rates in 1962 were \$3 for regular billing, \$1.25 for trailers, \$1 for apartments, \$1.50 for beauty shops, and \$4.50

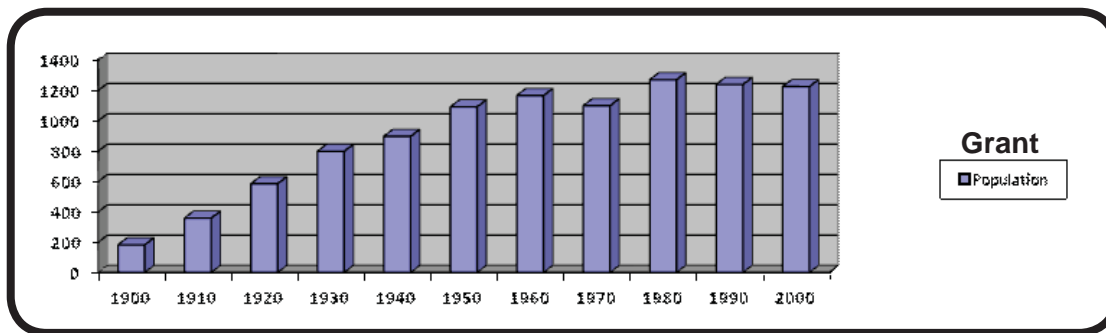
for service stations. The cost of current for pumping water was averaging \$236.58 per month. The cost of street lighting in 1962 was \$189.94 per month. In the 1970s, the population was 1,099 and an improvement project at the wastewater facility was underway. In 1974, the electric system was owned by the city and operated/supplied by Midwest Electric Membership Corporation. In the 1980s, the population increased to 1,270 and the gas system was supplied by KN Energy Inc. (1986). The

utilities were governed by a Board of Public Works at this time. By 1990, the population was 1,239, and the sewer system included a facultative retention lagoon system designed for 0.218 million gallons per day (mgd). The electric system in 1993 had a customer base of 781 services. In 2000, the population rose to 1,225 and the gas system was supplied by Kinder Morgan in 2004. Today, Grant is a second class city with a population over 1,000. It has a city park, a nine-hole public golf course,

a brick City Hall/Fire Hall building, and most streets are paved/curbed. The electrical system is owned by the city, operated by Midwest Electric Membership Corp., and supplied by Municipal Energy Association of Nebraska. The natural gas system is operated by SourceGas, police protection is provided by the Perkins County Sheriff's Department and the water and wastewater systems are publicly owned. Grant has been a member of the Utilities Section for over 30 years.

References: Nebraska Directory of Municipal Officials, 1965-1996, 1998-2011; Nebraska Municipal Review Magazine, 1928, 1971; Water Resources of Nebraska, December

1936; Venango "Buckle of the Wheat Belt", 1887-1967; Public Power Magazine, Vol. 51, Number 1, January-February 1993; Maps Tell A Story, 1991; Nebraska State Gazette & Business Directory, 1890; Who's Who in Nebraska, 1920; Perkins County, 1940.



Mark your calendars!

- **Jan. 11-13, 2012**
Utilities/Public Works Section Annual Conference
 Embassy Suites, Lincoln
- **Jan. 25-26, 2012**
Snowball Conference
 Holiday Inn, Kearney

Classifieds

Lights and Water Commissioner. City of Edgar, located in SE Nebraska, population 498, will be accepting applications for utility worker.

Work duties will involve repair and maintenance of city-owned electrical and water system. Also included in work duties, will be repair and maintenance of water system, sewer, pool, parks and streets.

Other work duties will vary from operating heavy equipment, paper work, and records keeping, snow removal to general labor of the maintenance and upkeep of all city-owned properties.

Salary is based on experience.

Job position open until filled.

Application forms and a list of minimum qualifications will be available at City Hall @ 508 3rd Street, Edgar, NE. (402) 224-

5145. Monday-Friday 9 AM - 5 PM.

Resumes may be sent to City of Edgar, Attn: Brad Brennfoerder, PO Box 485, Edgar, NE 68935.

Solid Waste Screening Workshop held

A Solid Waste Screening Workshop was held in Lincoln at the Landfill meeting/training room facility. This workshop was sponsored by the Utilities Section and the Cornhusker Chapter of the Solid Waste Association of North America (SWANA).

This workshop covered an overview of the "SWANA" solid waste screening course which in-

cluded a PowerPoint presentation on the six chapters. The afternoon covered work procedures/practices dealing with inclement weather and emergency responses such as a fire at a transfer station or landfill. This five-hour workshop meets the state of Nebraska's minimum training requirement for landfill and transfer station employees.

Safety Workshop held

A Safety Workshop was held Oct. 27, 2011, at the Downtown Holiday Inn in Lincoln. The workshop was sponsored by the League of Municipalities Utilities Section and the Nebraska Section American Water Works Association.

The morning sessions covered work zone safety practices and procedures. The afternoon sessions covered chemical safety and electrical safety with an emphasis on arc flash issues.

Fifty participants in attendance received recertification credit

toward their licenses. Wastewater and water operators grades 1-4 received five hours toward recertification of their licenses.

Handouts available included the CDC Building Safer Highway Work Zones manuals, and Lock-out-Tagout.

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Urban Forestry Workshop held

An Urban Forestry Workshop was held Oct. 1, 2011, at the Howard Johnson Hotel in Grand Island.

The workshop covered the basics of urban forestry management, proper tree pruning, line clearance chain saw safety and general load securement.

Employees from Imperial, Seward and Wahoo were in attendance. This workshop was sponsored by the League of Nebraska Municipi-

palities Utilities Section.

This course provided a basic foundation for parks workers, electric line workers or any other utility workers dealing with trees and shrubs in their community.

Many of the trees in our Nebraska communities are aging, not unlike other municipal infrastructure. They need attention to minimize liability, and enhance the aesthetics of our communities.

Utilities Section members only

Classifieds

Place your ad in the Classifieds section of the *Utilities Section Newsletter* free if you are a League or Utilities Section member.

Articles

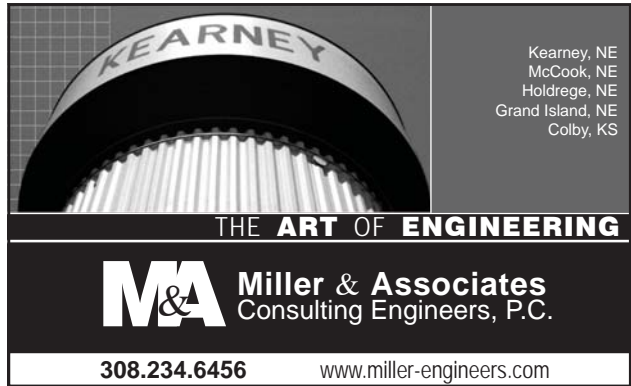
Have you installed or made improvements to your municipal public works or utilities? Share your progress with others by submitting an article. Many utilities may be planning a project just like you have completed.

Contact the League office at 402-476-2829 or email your article or ad to brendae@lonm.org.

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Training calendar for 2012

January

Jan. 4 Water Operator Training Workshop Fire Hall, Crete
Jan. 5 Water Operator Training Workshop VFW, Plattsmouth
Jan. 11-13 Utilities/Public Works Section Annual Conference Embassy Suites, Lincoln
Jan. 24 Water Operator Training Workshop Kearney
Jan. 25-26 Snowball Conference Holiday Inn, Kearney

February

Feb. 14 Water Operator Training Workshop Ogallala
Feb. 15 Water Operator Training Workshop Hastings
Feb. 16 Water Operator Training Workshop Beatrice
Feb. 27-28 Midwinter Conference Cornhusker Marriott Hotel, Lincoln
Feb. 28-Mar. 1 ... Electric Meter School Holiday Inn, Kearney

March

Mar. 6 Water Operator Training Workshop Wayne
Mar. 7 Water Operator Training Workshop Columbus
Mar. 8 Water Operator Training Workshop Blair

Workshops also are listed on our website at www.lonm.org "Calendar of Events."