
POWER PLANT

EJSCREEN Report (Version 2017)

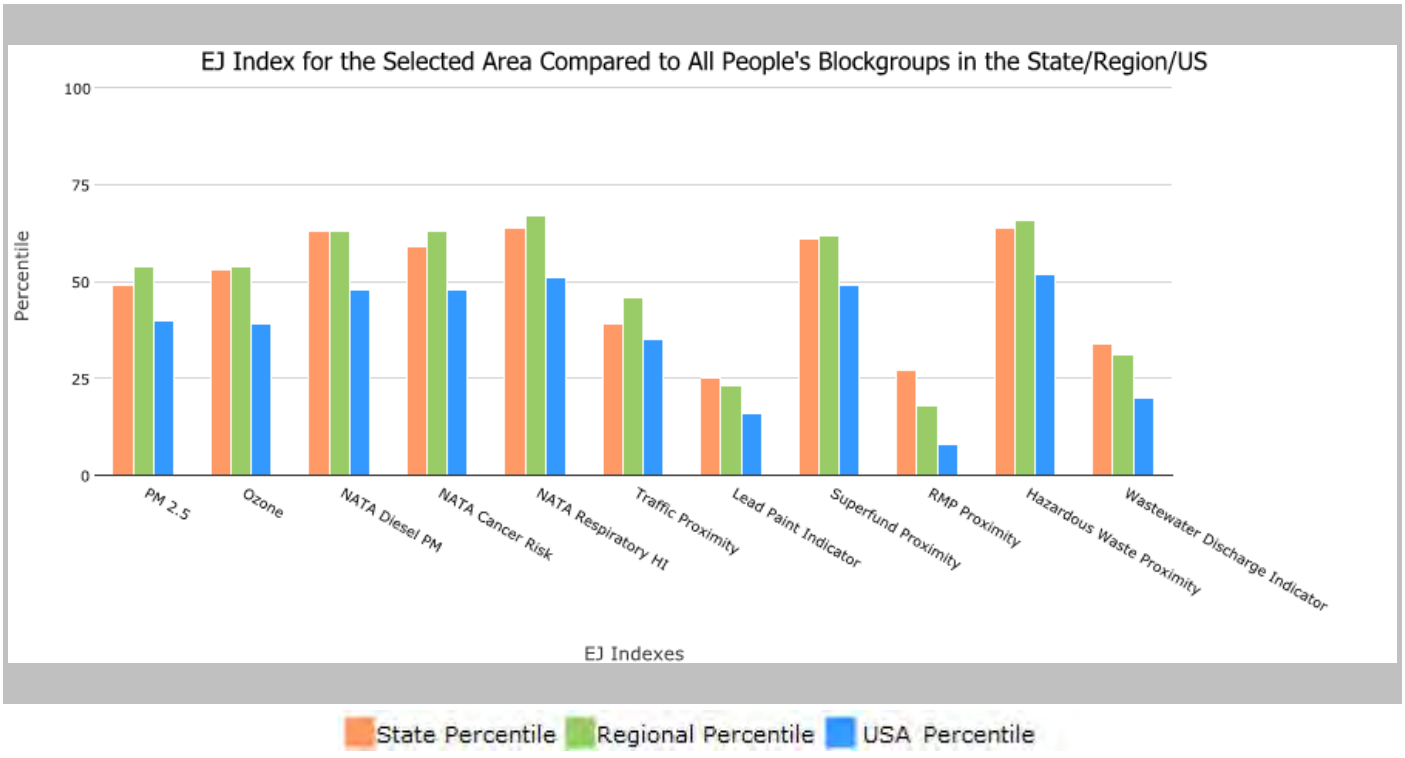
0.5 mile Ring around the Area, NEBRASKA, EPA Region 7

Approximate Population: 628

Input Area (sq. miles): 0.83

Pender Municipal Power Plant

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	49	54	40
EJ Index for Ozone	53	54	39
EJ Index for NATA* Diesel PM	63	63	48
EJ Index for NATA* Air Toxics Cancer Risk	59	63	48
EJ Index for NATA* Respiratory Hazard Index	64	67	51
EJ Index for Traffic Proximity and Volume	39	46	35
EJ Index for Lead Paint Indicator	25	23	16
EJ Index for Superfund Proximity	61	62	49
EJ Index for RMP Proximity	27	18	8
EJ Index for Hazardous Waste Proximity	64	66	52
EJ Index for Wastewater Discharge Indicator	34	31	20



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

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Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

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Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m^3)	8.6	8.47	38	9.45	11	9.14	33
Ozone (ppb)	38.9	38.5	64	40.1	18	38.4	63
NATA* Diesel PM (µg/m^3)	0.249	0.76	12	0.78	<50th	0.938	<50th
NATA* Cancer Risk (lifetime risk per million)	21	31	12	38	<50th	40	<50th
NATA* Respiratory Hazard Index	0.54	1.2	10	1.5	<50th	1.8	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	40	130	51	490	43	590	37
Lead Paint Indicator (% Pre-1960 Housing)	0.49	0.37	63	0.35	69	0.29	75
Superfund Proximity (site count/km distance)	0.017	0.14	19	0.1	18	0.13	14
RMP Proximity (facility count/km distance)	1.6	1.5	65	0.93	81	0.73	87
Hazardous Waste Proximity (facility count/km distance)	0.0091	0.07	16	0.072	10	0.093	5
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.00068	0.54	53	2.4	57	30	66
Demographic Indicators							
Demographic Index	22%	25%	57	26%	52	36%	34
Minority Population	12%	19%	53	19%	54	38%	27
Low Income Population	32%	31%	57	33%	51	34%	50
Linguistically Isolated Population	3%	3%	74	2%	81	5%	60
Population With Less Than High School Education	8%	9%	61	10%	52	13%	42
Population Under 5 years of age	6%	7%	39	7%	45	6%	47
Population over 64 years of age	24%	14%	86	15%	88	14%	89

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN Report (Version 2017)

1 mile Ring around the Area, NEBRASKA, EPA Region 7

Approximate Population: 1,096

Input Area (sq. miles): 3.23

Pender Municipal Power Plant

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	50	55	40
EJ Index for Ozone	53	54	40
EJ Index for NATA* Diesel PM	63	64	48
EJ Index for NATA* Air Toxics Cancer Risk	59	64	48
EJ Index for NATA* Respiratory Hazard Index	64	67	51
EJ Index for Traffic Proximity and Volume	39	46	35
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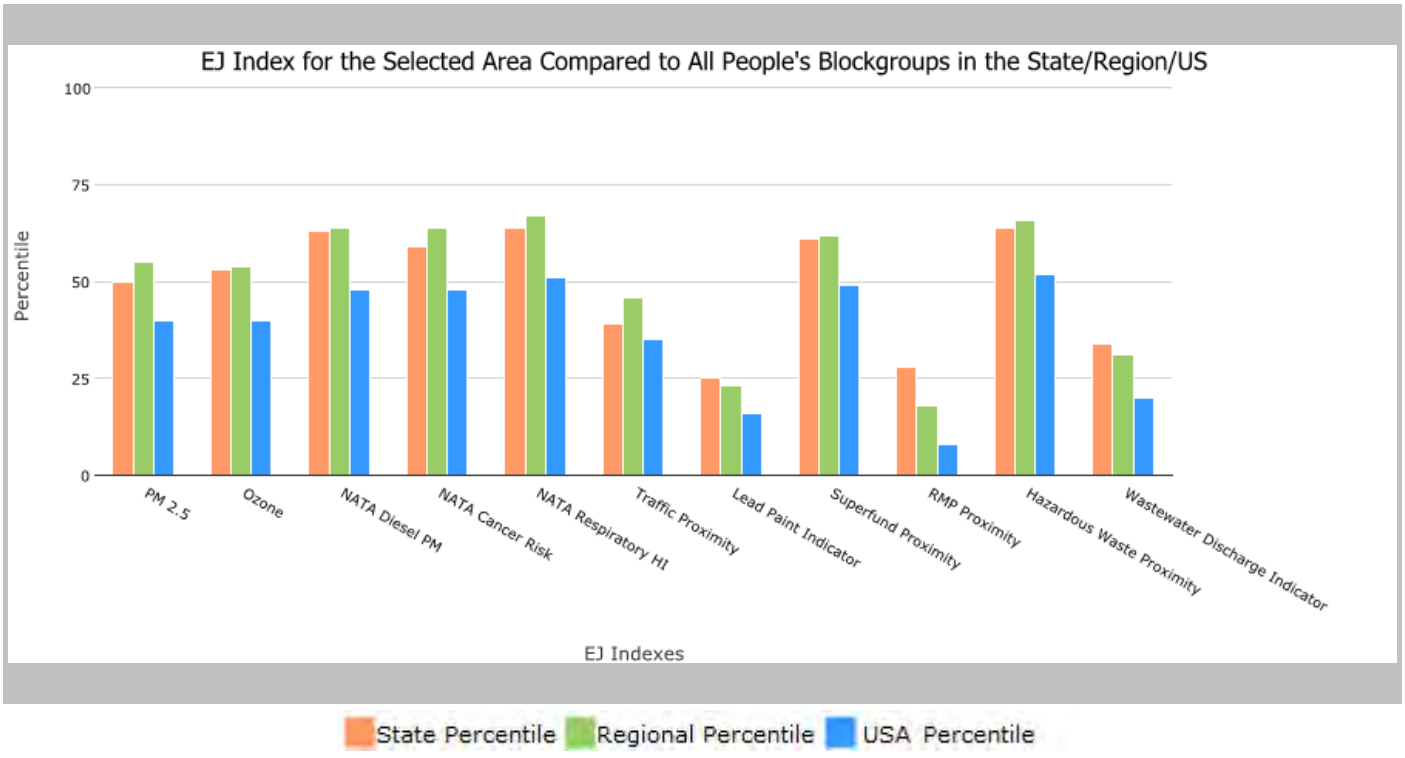

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Pender Municipal Power Plant

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

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Pender Municipal Power Plant

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Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.00067	0.54	52	2.4	57	30	65
Demographic Indicators							
Demographic Index	22%	25%	57	26%	52	36%	34
Minority Population	12%	19%	53	19%	54	38%	27
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EJSCREEN Report (Version 2017)

Blockgroup: 311739401003, NEBRASKA, EPA Region 7

Approximate Population: 1,136

Input Area (sq. miles): 5.55

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	49	54	40
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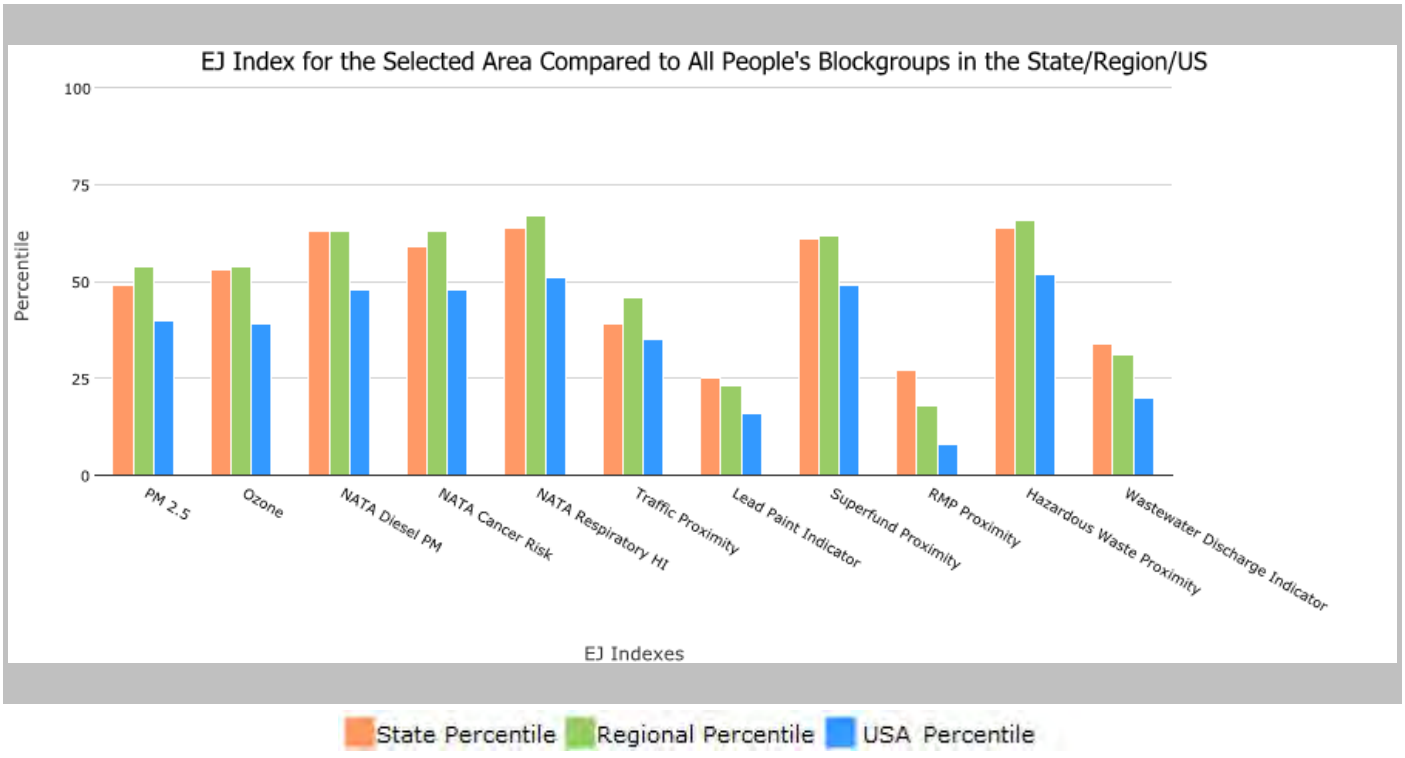

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Nebraska Ecological Services Field Office
9325 B South Alda Rd.
Wood River, NE 68883-9565
Phone: (308) 382-6468 Fax: (308) 384-8835
http://www.fws.gov//nebraskaes

In Reply Refer To: February 09, 2018
Consultation Code: 06E22000-2018-SLI-0167
Event Code: 06E22000-2018-E-00297
Project Name: Village of Pender Municipal Power Plant - Tribal Synthetic Minor Source Air Permit

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Nebraska Ecological Services Field Office
9325 B South Alda Rd.
Wood River, NE 68883-9565
(308) 382-6468

Project Summary

Consultation Code: 06E22000-2018-SLI-0167

Event Code: 06E22000-2018-E-00297

Project Name: Village of Pender Municipal Power Plant - Tribal Synthetic Minor Source Air Permit

Project Type: ** OTHER **

Project Description: Located at 205 North 3rd St., Pender, Nebraska within Omaha Tribe reservation.
Existing facility occupies ~13,000 ft2 of land in developed area and includes two existing buildings w/ footprint of ~6,000 ft2.
Proposed CAA permit action involves existing facility and will not involve expanding footprint or increasing emissions.
Permit will cover four existing Engine-Generators installed between 1952 and 1972 and will establish enforceable restrictions to limit NOx and CO emissions to avoid major source permitting requirements.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.11535961145945N96.70559965074055W

Counties: Thurston, NE

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Least Tern *Sterna antillarum* Population: interior pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505	Endangered
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened

Fishes

NAME	STATUS
Pallid Sturgeon *Scaphirhynchus albus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162	Endangered

Flowering Plants

NAME	STATUS
Western Prairie Fringed Orchid *Platanthera praeclara* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1669	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the E-bird data mapping tool (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the E-bird Explore Data Tool (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31

NAME	BREEDING SEASON
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

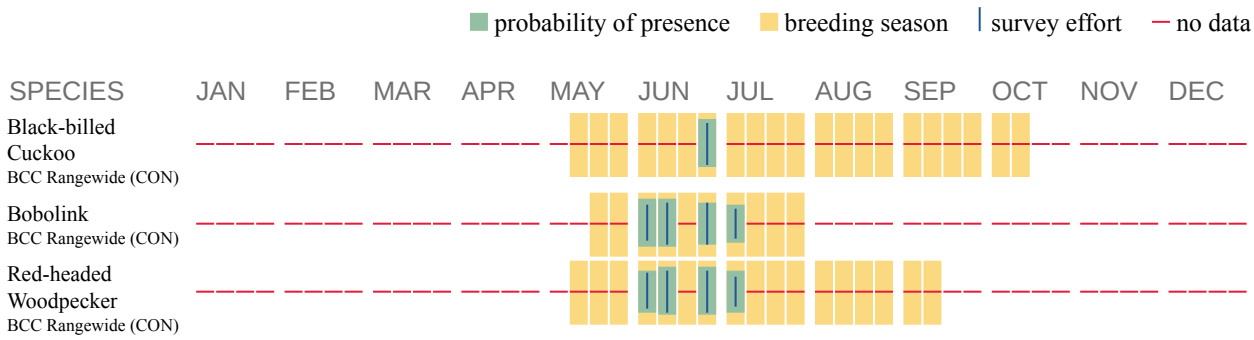
1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.



Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.
Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the BGEPA should such impacts occur.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

Webber, Robert

From: Webber, Robert
Sent: Friday, April 06, 2018 7:02 AM
To: villageofpender@abbnebraska.com; Tim.Grant2@omahatribe.com; tparker@omahatribe.com; joseph.painter@winnebagotribe.com; gary.buttermore@nebraska.gov; Sarah.Piziali@dnr.iowa.gov
Cc: Bustos, Patrick; Scott, Patricia A.; Peter, David
Subject: Pender Municipal Power Plant - Preliminary-Draft Air Permit
Attachments: PenderMPP Pre-Draft Permit 2018-04-05.pdf; PenderMPP TSD Pre-Draft 2018-04-05.pdf

Greetings,

Attached are "pre-drafts" of an Air Permit and Technical Support Document (TSD) for the Pender Municipal Power Plant. The pre-drafts are intended for your use only and have not been released to the public. Please don't release these pre-drafts outside of your organization at this time. The intent is to solicit your comments and feedback, and to ensure we have all our facts straight before finalizing a draft permit and proceeding to public notice. Once a draft permit is finalized, your organization will be mailed a copy of the public notice and provided a period of at least 30 days from the date of the public notice to submit formal comments.

Please review these pre-drafts and send me any comments, feedback and corrections you may have as soon possible and no later than Friday, April 27, 2018. Please call me if you have any questions.

Very Respectfully,

Bob Webber
Air Permitting & Compliance Branch
Air and Waste Management Division
U.S. Environmental Protection Agency, Region VII
11201 Renner Boulevard
Lenexa, KS 66219
Phone: 913-551-7251
webber.robert@epa.gov

United States Environmental Protection Agency
Region 7
Air and Waste Management Division
Air Permitting and Compliance Branch
11201 Renner Boulevard
Lenexa, KS 66219

SYNTHETIC MINOR SOURCE PERMIT

Permit Number: R7-TMNSR-FY18-001

In accordance with the provisions of the Clean Air Act (CAA) and the Federal Minor New Source Review Program in Indian Country, 40 C.F.R. §§ 49.151-49.161,

Pender Municipal Power Plant

is authorized to operate air emissions units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate at the following location(s):

205 North 3rd Street (NE Corner of Ivan St. and N 3rd St.)
Pender, Nebraska 68047

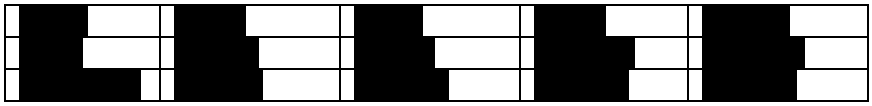
Pender Municipal Power Plant is located in Thurston County, within the exterior boundaries of the Omaha Indian Reservation.

Terms and conditions not otherwise defined in this permit have the meaning assigned to them in 40 C.F.R. Part 49. All terms and conditions of the permit are enforceable by the U.S. Environmental Protection Agency and citizens under the CAA.

This permit shall become effective on ??, 2018.

Issued this _____ day of _____, 2018, by

_____
Becky Weber, Director
Air and Waste Management Division



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SECTION I - FACILITY DESCRIPTION

(A) General Source Information

Owner:	Village of Pender P.O. Box 5 416 Main Street Pender, NE 68047
Facility:	Pender Municipal Power Plant 205 North 3rd Street (NE Corner of Ivan St. and 3rd St.) Pender, Nebraska 68047
County:	Thurston
Reservation:	Omaha Tribe of Nebraska
SIC Code:	4911 (Electric Services)
NAICS Code:	221112 (Fossil Fuel Electric Power Generation)

The Village of Pender owns and operates the Pender Municipal Power Plant and has a capacity lease agreement with Municipal Energy Agency of Nebraska (MEAN). This permit establishes federally enforceable nitrogen oxide (NOx) emission limits for the existing three (3) dual-fuel and one (1) diesel-only, compression ignition (CI) engine-generators totaling 7,120 horsepower at the Pender Municipal Power Plant by limiting the plant's hours of operation and fuel usage.

Air pollutants at this facility include nitrogen oxides (NOx), carbon monoxide (CO), sulfur oxides (SOx), volatile organic compounds (VOC), particulate matter (PM), PM with aerodynamic diameter equal to or less than 10 microns (PM10), and PM with aerodynamic diameter equal to or less than 2.5 microns (PM2.5), hazardous air pollutants (HAP), and greenhouse gases (GHG) emitted from combustion of natural gas and diesel fuel in internal combustion engines. The uncontrolled potential emissions for NOx and CO are above major source thresholds established under the Prevention of Significant Deterioration (PSD) permitting program regulations and/or the federal operating permit program regulations at 40 C.F.R. Part 71 (Title V or Part 71).

This permit is being issued under authority of the Tribal Minor New Source Review Permit Program at 40 C.F.R. Part 49 (TMNSR). Under 40 C.F.R. § 49.158, a synthetic minor source permit may be obtained under this program to establish a synthetic minor source for nonattainment major New Source Review (NSR), PSD and Title V purposes and/or a synthetic minor HAP source for CAA standards established for maximum achievable control technology (MACT) and Title V purposes. Any source that becomes a synthetic minor for NSR and Title V purposes but has other applicable requirements or becomes a synthetic minor for NSR but is major for Title V purposes, shall also apply for a Title V permit.

This permit establishes federally enforceable nitrogen oxide (NOx) and carbon monoxide (CO) emission limitations for four existing Engine-Generators to avoid PSD and/or Title V permitting requirements for major sources. The restrictions replace those agreed to by the owner pursuant to the March 7, 1999,

Potential to Emit (PTE) Transition Policy for Part 71 Implementation in Indian Country (50% PTE Transition Policy). In order to continue to avoid major source requirements, the permittee has requested a synthetic minor source permit and the reviewing authority is issuing this permit that establishes emission limitations to maintain NOx and CO pollutants below 100 tons per year.

(B) Emission Unit Descriptions

Emission Unit ID	Source Description	Year Installed	Identified Pollutant Emissions	Control Device – Pollutants Controlled	Control Device Efficiency	Emission Point(s)
EU-1-EG	**Dual-Fuel Fired Engine-generator:** Fairbanks Morse 38TDD8 1/8; Serial #: 38D867051TDFS9; 720 rpm; 2-cycle; 9-cylinder; Site Rated 2,160 hp; Calculated Power Output: 1,611 kW; Calculated Heat Input: 15.29 MMBtu/hr	1967	*PM, PM_{10}, $PM_{2.5}$, CO, NOx, SO_2 VOC, organic HAP; GHG*	Oxidation Catalyst - *CO*	≥ 70% as specified by Subpart ZZZZ	EP-1
EU-2-EG	**Diesel-Only Fired Engine-generator:** Fairbanks Morse 38TDD8 1/8; Serial #: 38D872065TDFS12; 720 rpm; 2-cycle; 12-cylinder; Site Rated 2,880 hp; Calculated Power Output: 2,148 kW; Calculated Heat Input: 20.43 MMBtu/hr	1972	*PM, PM_{10}, $PM_{2.5}$, CO, NOx, SO_2 VOC, organic HAP; GHG*	Oxidation Catalyst - *CO*	≥ 70% as specified by Subpart ZZZZ	EP-2
EU-3-EG	**Dual-Fuel Fired Engine-generator:** Fairbanks Morse 38DD8 1/8; Serial #: 967678; 720 rpm; 2-cycle; 5-cylinder; Site Rated 800 hp; Calculated Power Output: 597 kW; Calculated Heat Input: 5.56 MMBtu/hr	1952	*PM, PM_{10}, $PM_{2.5}$, CO, NOx, SO_2 VOC, organic HAP; GHG*	Oxidation Catalyst - *CO*	≥ 70% as specified by Subpart ZZZZ	EP-3
EU-4-EG	**Dual-Fuel Fired Engine-generator:** Fairbanks Morse 38DD8 1/8; Serial #: 969829; 720 rpm; 2-cycle; 8-cylinder; Site Rated 1,280 hp; Calculated Power Output: 954.5 kW; Calculated Heat Input: 8.90 MMBtu/hr	1961	*PM, PM_{10}, $PM_{2.5}$, CO, NOx, SO_2 VOC, organic HAP; GHG*	Oxidation Catalyst - *CO*	≥ 70% as specified by Subpart ZZZZ	EP-4
EU-5-ST	**Diesel Storage Tank:** 5,000-gallon Capacity	2016	*VOC, organic HAP*			EP-5
EU-6-WH	**Natural Gas Fired Water Heater:** Heat Input Capacity: **0.**25 MMBtu/hr		*PM, PM10, PM2.5, CO, NOx, SO2 VOC, organic HAP; GHG*			EP-6

Power Output calculated using site-rated horsepower (hp) and standard conversion factor: 1 hp = 0.7457 Kilowatt (kW).

Heat Input calculated using flow rate (gallons/hour) multiplied by 0.139 MMBtu/gallon conversion factor for diesel fuel as specified in 2012 URGE test included in permit application.

SECTION II - UNIT-SPECIFIC REQUIREMENTS

(A) Engine-generators EU-1-EG, EU-2-EG, EU-3-EG, EU-4-EG

(1) Emission Limitations

i. The permittee shall not operate the Engine-generator EU-1-EG at a capacity greater than 2,160 site-rated brake horsepower.

ii. The permittee shall not operate the Engine-generator *EU-2-EG* at a capacity greater than 2,880 site-rated brake horsepower.

iii. The permittee shall not operate the Engine-generator *EU-3-EG* at a capacity greater than 800 site-rated brake horsepower.

iv. The permittee shall not operate the Engine-generator *EU-4-EG* at a capacity greater than 1,280 site-rated brake horsepower.

v. The permittee shall operate the Diesel-Only Fired Engine-generator *EU-2-EG* with only diesel fuel.

vi. The permittee shall operate each Engine-generator with a non-resettable flow meter installed for measuring the amount of diesel fuel being consumed.

vii. The permittee shall operate each Engine-generator with a diesel fuel day tank to be used in combination with a flow meter for measuring the amount of diesel fuel being consumed.

viii. The permittee shall operate each of the three Dual-Fuel Fired Engine-generators with a non-resettable flow meter installed for measuring the amount of natural gas being consumed.

ix. The permittee shall not emit more than 95 tons of nitrogen oxides (NOx) per year from all four Engine-generators (EU-1-EG, EU-2-EG, EU-3-EG, and EU-4-EG), as determined on a 12-month rolling sum basis.

x. The permittee shall operate each Engine-generator with a non-resettable hour meter for measuring the time each Engine-generator is operated.

xi. The permittee shall comply with all applicable Emission and Operating Limitations in NESHAP Subpart A and Subpart ZZZZ for each engine.

(2) Monitoring, Recordkeeping and Reporting Requirements

i. The permittee shall maintain manufacturer's specifications and instructions for each Engine-Generator to verify the maximum manufacturer's design capacity at engine site conditions and to reference during operation and maintenance.

ii. The permittee shall maintain manufacturer's model number, specifications and instructions for each flow meter associated with the operation of each Engine-Generator to verify the maximum manufacturer's design capacity and to reference during operation and maintenance.

iii. The permittee shall calibrate each flow meter associated with the operation of each Engine-Generator at least once every five years.

iv. The permittee shall maintain manufacturer's specifications and instructions for each day tank associated with the operation of each Engine-Generator to verify the maximum manufacturer's design capacity and to reference during operation and maintenance.

v. The permittee shall maintain a written operational log for each of the Engine-generators that includes the following information, summarized monthly:

   a. Amount of diesel fuel consumed (gallons/month).
   b. Amount of natural gas fuel consumed (MMscf/month).
   c. Time of operation (hours/month).
   d. All maintenance activities conducted.

vi. Within fifteen days of the end of each month, the permittee shall calculate and record the NOx emissions from each Engine-Generator for the month, using the following equation:

NOx Emissions (lbs./month) =

3.2 lbs./MMBtu * [Diesel Fuel (gal/month) * 0.139 MMBtu/gal + Natural Gas (MMscf/month) * 1,000 MMBtu/MMscf]

Where

3.2 lbs./MMBtu is the uncontrolled NOx emission factor for Diesel Fuel fired engines in AP-42 Table 3.4-1
0.139 MMBtu/gal is the heat value of diesel fuel as provided in 2012 permit application
1,000 MMBtu/MMscf is the heat value of diesel fuel as provided in 2012 permit application

vii. Within fifteen days of the end of each month, the permittee shall calculate and record the NOx emissions from all Engine-Generators on a 12-month rolling sum basis, determined by adding the NOx emissions from all Engine-Generators for the month and then adding the NOx emissions from all Engine-Generators for the previous 11 months.

viii. Within fifteen days of the end of each month, the permittee shall calculate and record the total time that each Engine-generator is operated each year on a 12-month rolling sum basis, determined by adding the total number of hours of operation for the month and then adding the number of hours of operation for the previous 11 months.

ix. The permittee shall comply with all applicable Compliance, Testing, Notifications, Reports, and Records requirements in NESHAP Subpart A and Subpart ZZZZ for each engine.

(B) Diesel Storage Tank *EU-5-ST*

(1) Emission Limitations

i. The permittee shall receive and store diesel fuel at the facility in a tank with a maximum design storage capacity of 5,000 gallons.

ii. The permittee shall receive and store only NonRoad (NR) diesel fuel that meets the requirements in 40 C.F.R. § 80.510(b) for NR diesel fuel:

a. Sulfur content: 15 ppm maximum for NR diesel fuel.

b. Cetane index or aromatic content: minimum cetane index of 40; or a maximum aromatic content of 35 volume percent.

(2) Monitoring and Recordkeeping Requirements

i. The permittee shall maintain manufacturer's specifications and instructions for the storage tank to verify the manufacturer's maximum design capacity and to reference during operation and maintenance.

ii. For each shipment of diesel fuel received, the Permittee shall obtain and maintain purchase records and a fuel supplier certification, certifying that the diesel fuel received meets the requirements in 40 C.F.R. § 80.510(b) for NR diesel fuel.

iii. The permittee shall maintain a written operational log for the storage tank that includes the following information, summarized monthly:

a. Amount of diesel fuel received (gallons/month).
b. Amount of diesel fuel in storage at the end of the month (gallons).
c. All maintenance activities conducted.

(C) Water Heater EU-6-WH

(1) Emission Limitations

i. The permittee shall not operate the Water Heater EU-6-WH at a heat input capacity greater than 250,000 Btu/hr.

ii. The permittee shall operate the Water Heater with only natural gas.

(2) Monitoring and Recordkeeping Requirements

i. The permittee shall maintain manufacturer's specifications and instructions for the water heater to verify the manufacturer's maximum design capacity and to reference during operation and maintenance.

ii. The permittee shall maintain a written operational log for the Water Heater that includes the following information, summarized monthly:

a. Amount of natural gas fuel consumed (MMscf/month).
b. Time of operation (hours/month).
c. All maintenance activities conducted.

SECTION III - FACILITY-WIDE REQUIREMENTS

(A) Startup, Shutdown, Maintenance and Malfunction.

(1) At all times, including periods of startup, shutdown, maintenance and malfunction, the permittee shall operate each emission unit, including any associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions and considering the manufacturer's recommended operating procedures. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA, which may include, but is not limited to, monitoring results, review of installation, operation and maintenance procedures, and inspection of the source. Emissions during the processes of startups, shutdowns, maintenance, and malfunctions shall be included in calculating the total tons per year emitted from all emission units listed in Section I (B) at this facility.

(B) Records Retention Requirements.

(1) The permittee shall keep all records required by this permit, including the following, on-site for a minimum of five (5) years, and available for inspection by the reviewing authority.

i. All specifications and maintenance requirements developed by the manufacturer, vendor, or permittee for all emission units listed in Section I (B) at this facility, and each associated emission control and monitoring device required in this permit.

ii. All calibration, maintenance, repairs, rebuilds or replacements conducted for all emission units listed in Section I (B) at this facility, and each associated emission control and monitoring device required in this permit.

iii. All information used to calculate the monthly and 12-month rolling sums of NOx emissions as required to be determined in Section II (A) (2).

(2) The permittee shall keep all records legible and maintained in an orderly manner.

(C) Reporting Requirements.

(1) Annual Reports. Once each year no later than April 1st, the permittee shall submit a written annual report to EPA as specified below:

i. The report shall cover the period from January 1 to December 31 of the previous year.
ii. The report shall include an evaluation of the permittee's compliance with each requirement in Section II.
iii. The report shall include a copy of the written operational log for each of the Engine-generators that includes the following information, summarized monthly:
    a. Amount of diesel fuel consumed (gallons/month).
    b. Amount of natural gas fuel consumed (MMscf/month).
    c. Time of operation (hours/month).
    d. All maintenance activities conducted.
iv. The report shall include the monthly NOx emissions from each of the Engine-generators.
v. The report shall include the monthly and 12-month rolling sums of NOx emissions from all Engine-generators.
vi. The report shall include emissions from startups, shutdowns, and malfunctions.
vii. The report shall include the 12-month rolling sums for the time that each Engine-generator is operated.
viii. All reports shall be certified to truth and accuracy by the person primarily responsible for Clean Air Act compliance for the permittee.
ix. A copy of the written annual report shall be submitted to:

Environmental Contact
Omaha Tribe of Nebraska
P.O. Box 368
100 Main Street
Macy, NE 68039

(2) Deviation Reporting. The permittee shall promptly submit a written report to EPA any deviations of permit requirements, including those attributable to upset conditions, the probable cause of such deviation, and any corrective actions or preventative measures taken.

A "prompt" deviation report is one that is postmarked as follows:

i. Within 30 days from the discovery of any deviation of the emission limits or operational limits that are left uncorrected for more than 24 hours after discovering the deviation; and

ii. By April 1st for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the permittee's ability to meet the emission limits.

SECTION IV – GENERAL PERMIT REQUIREMENTS

(A) Definitions

(1) Terms and conditions in this permit have the meaning assigned to them in 40 C.F.R. § 49.152 unless other regulations or statutes are referenced or applicable.

(B) Issuance and Effective Date of Permit

(1) EPA is issuing this permit pursuant to the Federal Minor New Source Review Program in Indian Country, 40 C.F.R. §§ 49.151-49.161.

(2) The Effective Date is specified on the first page of this permit.

(C) Construction without a Permit

(1) If the permittee constructs or operates any source or modification not in accordance with the terms of any approval to construct, the permittee shall be subject to appropriate enforcement action.

(D) Construction Approval

(1) Nothing in this permit shall alter the requirement for the permittee to obtain a construction permit prior to beginning construction or modification of an emission unit.

(2) Approval for construction or installation shall not relieve the permittee of the responsibility to comply fully with applicable provisions of any other requirements of federal law or regulation, including Title V of the CAA.

(E) Modifications to Existing Permitted Emissions Units/Limits

(1) For proposed modifications, as defined at 40 C.F.R. § 49.152(d), that would increase an emissions unit's allowable emissions of pollutants above its existing permitted annual allowable emissions limit, the permittee shall first obtain a permit modification pursuant to the TMNSR regulations approving the increase. For a proposed modification that is not otherwise subject to review under the PSD or TMNSR regulations, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 C.F.R. § 49.159(f).

(F) Relaxation of Legally and Practically Enforceable Limits

(1) As provided by 40 C.F.R. § 52.21(r)(4), at such time that a new or modified source within this permitted facility/source or modification of this permitted facility/source becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of the permitted facility/source to otherwise emit a pollutant, such as a restriction on hours of operation, then the requirements of the PSD regulations shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(G) Compliance with Permit Requirements

(1) The permittee shall comply with each term and condition in this permit. Failure to comply with any term or condition of this permit constitutes a violation of the permit, and may constitute a violation of the CAA and serve as grounds for:

i. An enforcement action under Section 113 of the CAA; or
ii. Termination, revocation and reissuance, or modification of this synthetic minor permit.

(2) This permit currently requires monthly calculations of emissions. Should EPA determine that calculated emissions are approaching or exceeding an emission limit, or should EPA determine that the permittee is failing to maintain adequate monitoring and recordkeeping requirements, EPA may revise, reopen or modify the permit to require daily calculations of emissions and/or require additional control technologies and emission reduction measures. A revision that requires more frequent reporting of daily calculations of emissions is an administrative permit revision under the TMNSR program, 40 C.F.R. §149.159(f) (2).

(3) It is not a defense in an enforcement action for violation of this permit that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) Compliance with the terms of this permit does not relieve or exempt the permittee from compliance with other applicable Clean Air Act requirements or other applicable federal requirements, tribal, state or local laws or regulations.

(H) Prohibition on Violation of National Ambient Air Quality Standards and Prevention of Significant Deterioration Increments [40 CFR 49.155 (a) (7) (ii)]

(1) The emission units subject to this construction permit shall not cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS) or to a violation of a Prevention of Significant Deterioration (PSD) increment.

(I) Submittals

(1) Unless otherwise directed by the EPA or this permit, the permittee shall submit a copy of all test plans, reports, certifications, notifications and other information pertaining to compliance with this permit to:

Tribal Air Enforcement Coordinator
Air Compliance and Enforcement Section (ACES)
Air Permitting and Compliance Branch
Air and Waste Management Division
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, KS 66219

(2) The permittee shall submit permit applications, applications for permit amendments, and other applicable permit information, which includes but is not limited to applications and information regarding installation of control equipment, replacement of an emissions unit, and requests for changes that contravene current permit terms, to:

Tribal Air Permits Coordinator
Air Permitting and Compliance Branch (APCO)
Air and Waste Management Division
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, KS 66219

(J) Severability

(1) The terms and conditions in this permit are distinct and severable. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit. If any term or condition in this permit is held invalid, such invalidity shall not affect the validity or application of other terms or conditions.

(K) Entry and Inspection

(1) Upon presentation of proper credentials, you, as the permittee, shall allow a representative of the EPA to:

i. Enter upon your premises where a source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of the permit;
ii. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
iii. Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
iv. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
v. Record any inspection by use of written, electronic, magnetic and photographic media.

(L) Circumvention

(1) The permittee shall not build, erect, install or use any article, machine, equipment or process, the use of which conceals any emission which would otherwise constitute a violation of an applicable standard.

(M) Reservation

(1) The permit does not convey any property rights of any sort or any exclusive privilege.

(N) Permit Revision, Reopening, Revocation and Reissuance, or Termination

(1) EPA may revise, reopen, revoke and reissue, or terminate this permit for cause. The EPA may reopen this permit for a cause on its own initiative, e.g., if this permit contains a material mistake or the permittee fails to assure compliance with the applicable requirements.

(2) The filing by the permittee of a request for a permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(3) The permittee shall furnish to the reviewing authority, within a reasonable time, any information that the reviewing authority may request in writing to determine whether cause exists for revising, revoking and reissuing or terminating the permit or to determine compliance with the permit. For any such information claimed to be confidential, you must also submit a claim of confidentiality in accordance with 40 C.F.R. Part 2, Public Information, Subpart B—Confidentiality of Business Information.

Technical Support Document (TSD)
for
Pender Municipal Power Plant
Draft Synthetic Minor Source Permit
Permit No. R7-TMNSR-FY18-001

This document sets forth the legal and factual basis for permit conditions, with references to applicable Clean Air Act statutory and regulatory provisions, including provisions under the federal Tribal Minor New Source Review (TMNSR) program, 40 C.F.R. §§ 49.151 - 49.161.

40 CFR Section 49.158 establishes a permitting program for air pollution sources located within Indian country to provide for the establishment of requirements that are Federally-enforceable and enforceable as a practical matter. The owner or operator of an air pollution source who wishes to obtain federally and practicably enforceable limitations on the source's actual emissions or potential to emit must submit an application to the Permitting Authority requesting such limitations. The United States Environmental Protection Agency (EPA) then develops the permit via a public process. The permit remains in effect until it is modified, revoked or terminated by the EPA in writing.

This technical support document fulfils the requirement of 40 CFR Section 49.158 (b) (4) by describing the proposed limitation and its effect on the potential to emit of the air pollution source. Unlike the Air Quality Permit, this Technical Support Document is not legally enforceable. The Permittee is obligated to follow the terms of the permit. Any errors or omissions in the summaries provided here do not excuse the Permittee from the requirements of the permit.

TSD Table of Contents

1.0 SOURCE DESCRIPTION AND CONTACT INFORMATION

(A) Permit Applicant and Facility Information

Permit Applicant	Facility (SIC Code: 4911, electric generating facilities)
Village of Pender P.O. Box 5 416 Main Street Pender, Nebraska 68047	Pender Municipal Power Plant P.O. Box 5 205 North 3rd St. (NE Corner of Ivan St. & N 3rd St.) Pender, Nebraska 68047

(B) Permit Applicant and Tribe Environmental Contact Information

Permit Applicant's Facility Contact:	**Tribe Environmental Contact:**
Mr. Bruce Paeper, Utilities Superintendent Village of Pender P.O Box 5 416 Main Street Pender, Nebraska 68047 Email: villageofpender@abbnebraska.com Phone: 402-922-0999 Fax: 402-385-3862	Mr. Tim Grant, Environmental Contact Omaha Tribe of Nebraska and Iowa P.O. Box 368 100 Main Street Macy, NE 68039 Email: tim.grant2@omahatribe.com Phone: 402-837-5391

(C) Source Description

The Pender Municipal Power Plant is in the Village of Pender, Nebraska and within the exterior boundaries of the Omaha Tribe's reservation. On March 22, 2016, the United States Supreme Court ruled that the Omaha Tribe's reservation was not diminished by an 1882 federal law (disputed area included the Village of Pender). The Omaha Tribe's reservation occupies the southern half of Thurston County, Nebraska.

The facility operates under standard industrial classification (SIC) code 4911 for Electric Services and the North American Industry Classification System (NAICS) code 221112 for Fossil Fuel Electric Power Generation. The facility is operated as a peak/standby plant. Electrical power can be generated quickly during peak electrical energy demands or during emergencies. The Permit Applicant has a capacity lease agreement with Municipal Energy Agency of Nebraska (MEAN) for 3,955 kW. The MEAN capacity lease agreement is for the purpose of economic dispatching by MEAN electric power and energy from such generating facilities for the common benefit of all Participants and can also be used for distribution system-wide outage or blackout caused by the transmission interconnection or distribution system or weather. With advanced notice to MEAN, the excess generation, not leased to MEAN, is permitted to be utilized by the Village for any reason. During emergencies, the Participant can separate from the grid and begin to self-generate to stabilize the distribution system. An annual Uniform Rating of Generation Equipment (URGE) test and monthly testing and unit exercising is also completed to ensure the Engine-generators can operate reliably if called upon. The current recordkeeping procedures for each engine-generator, on a monthly and annual basis include hours run, kilowatt-hours (kwh) generated, diesel consumed and natural gas consumed.

A permit application received by EPA on September 4, 2012, indicates that the Village of Pender currently operates a municipal power plant consisting of three (3) dual-fuel and one (1) diesel-only, compression ignition (CI) engine-generators with a total capacity of approximately 5,080 kW (7,120 HP). Engine-generators included in the application are described in the table below.

Engine-generators						
Emission Unit	Unit 1	Unit 2	Unit 3	Unit 4	*Retired*	Total for Active Units
Unit Type	Duel-Fuel Engine-generator	Diesel-only Engine-generator	Duel-Fuel Engine-generator	Duel-Fuel Engine-generator	*Diesel-only Engine-generator*	(3) dual-fuel (1) diesel-only
Manufacturer /Model	Fairbanks Morse/ 38TDD8 1/8	Fairbanks Morse/ 38TDD8 1/8	Fairbanks Morse/ 38DD8 1/8	Fairbanks Morse/ 38DD8 1/8	*Fairbanks Morse/ 32-14x17*	-
Serial #	38D867051TDFS9	38D872065TDFS12	967678	969829	*780205*	-
Install Year	1967	1972	1952	1961	*1939*	-
Crankshaft Speed	720 rpm	720 rpm	720 rpm	720 rpm	*300 rpm*	-
Operating Cycle	2-cycle	2-cycle	2-cycle	2-cycle	*unknown*	-
# Cylinders	9	12	5	8	*5*	34
Site-rated Horsepower Output	2,160 hp	2,880 hp	800 hp	1,280 hp	*unknown*	7,120 hp
Engine Rating in Application	1,550 kW *or* *1,600 kW*	2,070 kW	560 kW	900 kW	*250 kW*	5,080 kW *or* *5,130 kW*
Calculated Power Output*	1,611 kW	2,148 kW	596.6 kW	954.5 kW	*unknown*	5,310 kW
Flow rate in Application	110 gals/hr	147 gals/hr	40 gals/hr	64 gals/hr	*unknown*	361 gals/hr
Engine Rating in Application	5.290 MMBtu/hr	7.065 MMBtu/hr	1.911 MMBtu/hr	3.072 MMBtu/hr	*unknown*	17.338 MMBtu/hr
Calculated Heat Input**	15.29 MMBtu/hr	20.43 MMBtu/hr	5.56 MMBtu/hr	8.90 MMBtu/hr	*unknown*	50.18 MMBtu/hr
Calculated Heat Input***	15.12 MMBtu/hr	20.16 MMBtu/hr	5.60 MMBtu/hr	8.96 MMBtu/hr	*unknown*	49.84 MMBtu/hr
Control Device / Efficiency	Oxidation Catalyst with CPMS / Reduce CO ≥ 70%	Oxidation Catalyst with CPMS / Reduce CO ≥ 70%	Oxidation Catalyst with CPMS / Reduce CO ≥ 70%	Oxidation Catalyst with CPMS / Reduce CO ≥ 70%	*none*	-

* Calculated using site-rated horsepower specified in 40 CFR part 63, subpart ZZZZ notifications, and standard conversion factor*: 1.0 Horsepower (hp) = 0.7457 Kilowatt (kW)*

** Heat Input calculated using flow rate (gallons/hour) multiplied by 0.139 MMBtu/gallon conversion factor for diesel fuel as specified in 2012 URGE test included in permit application.

*** Heat Input calculated using site-rated horsepower and conversion factor derived from AP42 Table 3.3-1: *1 hp = 0.007 MMBtu/hr*, that equates to an energy conversion efficiency of approximately 36% from engine fuel input to power output.

The following two tables provide data on both diesel fuel oil operations and dual fuel operations and were derived from Emission Inventory reports submitted to the Nebraska Department of Natural Resources (NDEQ):

Diesel Fuel Oil Only Operations									
Unit	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1	Run Time (hours)	0	4.5	1	7	4	2	4	1
1	Diesel (gal)	0	340	92	560	290	150	311	50
1	Diesel (MMBtu)	0.00	47.26	12.79	77.84	40.31	20.85	43.23	6.95
2	Run Time (hours)	26.5	28.5	12	36.6	13.2	4.9	3.1	6.5
2	Diesel (gal)	2,637	3,083	1,520	4,363	1,654	657	478	869
2	Diesel (MMBtu)	366.54	428.54	211.28	606.46	229.91	91.32	66.44	120.79
3	Run Time (hours)	11.5	4	6	0	0	0	0	3
3	Diesel (gal)	200	140	155	0	0	0	0	39
3	Diesel (MMBtu)	27.80	19.46	21.55	0.00	0.00	0.00	0.00	5.42
4	Run Time (hours)	0	8	6	3	11.8	5.1	6.3	3.6
4	Diesel (gal)	0	265	330	260	620	340	140	73
4	Diesel (MMBtu)	0.00	36.84	45.87	36.14	86.18	47.26	19.46	10.15

Dual Fuel Operations									
Unit	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1	Run Time (hours)	15.5	10	11	28	11.9	3		2.5
1	Diesel (gal)	313	120	185	366	220	30		29
1	Diesel (MMBtu)	43.51	16.68	25.72	50.87	30.58	4.17		4.03
1	Natural Gas (MMBtu)	162	133	119	393	99	34		67
1	Total Fuel (MMBtu)	205.51	149.68	144.72	443.87	129.58	38.17		71.03
1	Ratio Diesel to Total Fuel	0.212	0.111	0.178	0.115	0.236	0.109		0.057
3	Run Time (hours)	9	10	16	14	14.5	5	4.1	
3	Diesel (gal)	77	90	160	83	160	50	40	
3	Diesel (MMBtu)	10.70	12.51	22.24	11.54	22.24	6.95	5.56	
3	Natural Gas (MMBtu)	44	46	84	53	69	19	15.5	
3	Total Fuel (MMBtu)	54.70	58.51	106.24	64.54	91.24	25.95	21.06	
3	Ratio Diesel to Total Fuel	0.196	0.214	0.209	0.179	0.244	0.268	0.264	
4	Run Time (hours)	55.5	6	12	16.2	2.9			0.7
4	Diesel (gal)	683	50	100	130	40			100
4	Diesel (MMBtu)	94.94	6.95	13.90	18.07	5.56			13.90
4	Natural Gas (MMBtu)	295.00	50.00	84.00	33.00	22.00			8.00
4	Total Fuel (MMBtu)	389.94	56.95	97.90	51.07	27.56			21.90
4	Ratio Diesel to Total Fuel	0.243	0.122	0.142	0.354	0.202			0.635

Unit 2 is an engine that combusts only diesel fuel. Unit 1, Unit 3, and Unit 4 are dual fuel engines with the capability to combust both natural gas and diesel fuel. Based on the definitions of spark ignition and compression ignition in 40 CFR 63.6675, the three dual fuel engines have been operated as CI engines. As dual fuel CI engines, diesel fuel is used for compression ignition and natural gas is used as the primary fuel at an annual average ratio of 2 parts or more diesel fuel to 100 parts total fuel on an energy equivalent basis. For each year since at least 2009 the Village of Pender has reported an annual average ratio of over 2 parts diesel to 100 parts total fuel for each of the three dual fuel engines.

After noticing that that the flow rate values for Unit 2 (147 gal/hr) and Unit 4 (64 gal/hr) provided in the 2012 permit application appear to be lower than the diesel fuel usage rates for those two units derived from several emissions reports (highest values found were 170 gal/hr for Unit 2 in 2012, and 86.67 gal/hr for Unit 4 in 2013), EPA requested that the Permit Applicant verify the maximum flow rates for each engine. The Permit Applicant's consultant responded indicating that the gallons of diesel fuel reported appear to have been overestimated. In 2017, diesel fuel day tanks and meters were installed for each engine-generator unit to better improve accuracy of fuel usage monitoring.

As described in the 2012 permit application, the Permit Applicant has retired a smaller 250 kW CI engine (Fairbank Morse Engine # 780205, Model 32-14X17, 5 cylinders) installed in 1939 that will no longer be operated to burn any fuel for electricity production.

Unit 5	Diesel Storage Tank	Year Installed 2016	5,000-gallon Capacity

Not included in the 2012 permit application is a 5,000-gallon fixed roof tank installed in 2016 for storing diesel fuel. The tank was included in a 2016 Annual Emissions Inventory for the facility submitted to the Nebraska Department of Environmental Quality. According to a 2004 EPA inspection report, diesel fuel was previously stored in three 12,000 gallon tanks. Actual emissions reported for 2016 from the storage tank due to breathing loss and working loss were 0.05 lbs./yr. (0.000025 tons/yr.) based on a throughput of 1,160 gallons. The emission factors used to calculate the reported actual VOC emissions were 0.04 lb./1,000 gal for breathing loss and 0.002 lb./gal for working loss. The emission factors used are one tenth of the uncontrolled VOC emission factors specified in Webfire for SCC 40301019 (0.4 lb./gal) and SCC 40301021 (0.02 lb./gal) associated with Petroleum and Solvent Evaporation > Petroleum Product Storage at Refineries > Fixed Roof Tanks (Varying Sizes) > Distillate Fuel #2.

Unit 6	Natural Gas Fired Water Heater	Year Installed *Unknown*	Heat Input: 0.25 MMBtu/hr

According to a 2004 EPA inspection report (not included in the 2012 application), the facility has operated one boiler (250,000 Btu/hr – natural gas) that does not produce steam. During freezing weather, the boiler has been used as a hot water heater to warm five electric generation engines by circulating hot water through them so they can be brought up to speed quickly.

2.0 AIR POLLUTANT EMISSIONS AND REGULATORY ANALYSIS

Pollutants emitted at this facility include nitrogen oxides (NOx), carbon monoxide (CO), sulfur oxides (SOx), volatile organic compounds (VOC), particulate matter (PM), PM with aerodynamic diameter equal to or less than 10 microns (PM10), and PM with aerodynamic diameter equal to or less than 2.5 microns (PM2.5), hazardous air pollutants (HAP), and greenhouse gases (GHG) emitted from combustion of natural gas and diesel fuel in internal combustion engines. The uncontrolled potential emissions for NOx and CO are above major source thresholds under Prevention of Significant Deterioration (PSD) permitting requirements and/or Title V (Part 71) permitting requirements.

On July 1, 2011, the United States Environmental Protection Agency (EPA) adopted regulations (76 FR 38748) codified at 40 CFR sections 49.151 through 49.161, establishing a Federal Implementation Plan (FIP) under the Clean Air Act for Indian country. This FIP includes federal Tribal Minor NSR (TMNSR) regulations for the protection of air resources in Indian country. The EPA is charged with direct implementation of the program regulations where there is no approved Tribal implementation plan. This permit has been developed pursuant to 40 CFR § 49.158 which creates an air permitting mechanism for major sources that wish to voluntarily limit emissions to become synthetic minor sources.

The TMNSR program requires preconstruction permitting for new and modified minor sources, and provides a mechanism for an otherwise major stationary source of regulated NSR pollutants to voluntarily accept restrictions on its potential to emit to become a synthetic minor source. This mechanism may also be used by an otherwise major source of hazardous air pollutants (HAP) to voluntarily accept restrictions on its potential to emit to become a synthetic minor HAP source. Such restrictions must be enforceable as a practical matter, and the reviewing authority has the discretion to require any additional requirements, including control technology requirements, based on the specific circumstances of the source.

The draft permit limits both nitrogen oxides (NOx) and carbon monoxide (CO) emissions to avoid both PSD permitting requirements for major sources and Title V (Part 71) permitting requirements for major sources. The restrictions replace those agreed to by the owner pursuant to the March 7, 1999, Potential to Emit (PTE) Transition Policy for Part 71 Implementation in Indian Country (50% PTE Transition Policy).

(A) Synthetic Minor Source Permit Request

In a letter received February 27, 2001, the Village of Pender indicated to EPA Region 7 that it would comply with the recordkeeping requirements of the 1999 Potential to Emit (PTE) transition policy by which EPA would treat a source as non-major for the purposes of the Title V program if it keeps records to show that its actual emissions are below 50 percent of the PTE thresholds for major source status.

The 1999 PTE transition policy specified that it would be implemented until EPA adopts and implements a mechanism that a source can use to limit its PTE. Since, a purpose of the Federal TMNSR program is to provide such a mechanism, its implementation terminates the PTE transition policy. Pursuant to 40 CFR 49.151(c)(1)(ii)(D) and 40 CFR 49.153(a)(3)(v), existing sources previously operating under a synthetic minor mechanism, such as the 1999 PTE transition policy, were required to submit an application pursuant to § 49.158 for a synthetic minor source permit under this TMNSR program by September 4, 2012.

As the owner of an existing synthetic minor source established by the 1999 Potential to Emit (PTE) transition policy, the Village of Pender was required to submit an application pursuant to §49.158 for a synthetic minor source permit under this program by September 4, 2012.

TMNSR program overview applicability provision 40 CFR § 49.151(c) (1) (ii) (D):

> *If your existing synthetic minor source and/or synthetic minor HAP source was established through a mechanism other than those described in paragraphs (c)(1)(ii)(B) and (C) of this section, you must submit an application pursuant to §49.158 for a synthetic minor source permit under this program by September 4, 2012. The reviewing authority has the discretion to require any additional requirements, including control technology requirements, based on the specific circumstances of the source.*

EPA Region 7 received a synthetic minor permit application from the Village of Pender on September 4, 2012, for the continued operation of four existing engines. EPA Region 7 requested additional information from the Village of Pender's consultant Mr. David R. Peterson, PE in an email on November 1, 2012. On November 2, 2012, after Mr. Peterson responded providing additional information, EPA Region 7 acknowledged that the synthetic minor permit application was administratively complete pursuant to 40 CFR § 49.154. Based upon information contained in the application and additional information, EPA Region 7 finds that absent any restrictions on its PTE, the source would have the potential to emit regulated NSR pollutants in amounts that are at or above those for major sources in the Title V program and the PSD program (40 CFR 52.21). Specifically, without restrictions that are enforceable as a practical matter, the source would otherwise have the potential to emit the NOx and CO pollutants at major source levels, as defined by both the Title V and PSD programs. The synthetic minor permit application, as supplemented, proposed emissions limitations to keep NOx emissions below 95 tons per year by allowing each of the four engines at the facility to be operated a maximum of 1,200 hours with facility-wide fuel usage that does not exceed 433,426 gallons of diesel fuel on a 12-month rolling average.

EPA reviewed the calculations used in the supplemented permit application to derive the proposed emissions limitations to keep NOx emissions below 95 tons per year. EPA determined that the calculations use a NOx emission factor from AP-42, Table 3.4-1 for uncontrolled Dual Fuel fired engines that assumes the use of 95% natural gas and 5% diesel fuel.

As shown in the table below, the dual fuel operations at the facility have been using fuels with diesel fuel percentages that are higher than the 5% assumed by AP-42 for using the NOx emission factor for uncontrolled Dual Fuel fired engines.

Dual Fuel Operations									
Unit	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1	Ratio Diesel to Total Fuel	0.212	0.111	0.178	0.115	0.236	0.109		0.057
1	Ratio as multiple of 5% diesel	4.23	2.23	3.55	2.29	4.72	2.18		1.13
3	Ratio Diesel to Total Fuel	0.196	0.214	0.209	0.179	0.244	0.268	0.264	
3	Ratio as multiple of 5% diesel	3.91	4.28	4.19	3.58	4.88	5.36	5.28	
4	Ratio Diesel to Total Fuel	0.243	0.122	0.142	0.354	0.202			0.635
4	Ratio as multiple of 5% diesel	4.87	2.44	2.84	7.08	4.03			12.69

For each of the three dual fuel engines, the ratio of diesel to total fuel usage has been consistently above the 5% assumed by AP-42 for using the lower NOx EF. Out of the eight-year period reviewed, only one dual-fuel engine was operated for a calendar year close to the 5% assumed by AP-42 for using the lower NOx EF. In 2016 Unit 1 was operated at 5.7% diesel (1.14 x 5%), the lowest percentage used by an engine in the 8-year period. In 2016 Unit 4 was operated at 63.5% diesel (12.7 x 5%), the highest percentage used by a dual-fuel engine in a calendar year within the 8-year period.

The emission factors used in the Village of Pender's calculations for both Diesel Fuel Only and Dual Fuel operations are from AP-42 Chapter 3.4 Large Stationary Diesel and All Stationary Dual Fuel Engines, Table 3.4-1. Given the lack of better emission factors, such as from site specific testing or engine manufacturer data, and given the historically low emissions from of the engines, EPA believes that use of AP-42 factors is appropriate. However, given the higher percentages of diesel used in the Dual Fuel Operations than that assumed by AP-42 for use of the lower EF for dual fuel operations, EPA believes that determining emissions for both types of operation using the worst-case EF from AP-42 is appropriate. Should calculated emissions approach an emission limit, EPA may request that the Village of Pender perform site-specific testing of the engines to determine better emission factors.

The following table shows EPA calculated NOx emission values for both types of operation using the uncontrolled NOx EF for Diesel Fuel (3.2 lbs./MMBtu) from AP-42, Table 3.4-1:

Diesel Fuel Oil Only Operations Subtotals (using combined heat input of 50.18 MMBtu/hr)									
Units	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1,2,3&4	Run Time (hours)	38	45	25	46.6	29	12	13.4	14.1
1,2,3&4	Diesel (gal)	2,837	3,828	2,097	5,183	2,564	1,147	929	1031
1,2,3&4	Diesel (MMBtu)	394.34	532.09	291.48	720.44	356.40	159.43	129.13	143.31
1,2,3&4	NOx Emissions (lbs.)	1261.9	1702.7	932.8	2305.4	1140.5	510.2	413.2	458.6
1,2,3&4	NOx Emissions (tons)	0.63	0.85	0.47	1.15	0.57	0.26	0.21	0.23
Dual Fuel Operations Subtotals (using combined heat input of 29.75 MMBtu/hr)									
Units	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1,3&4	Run Time (hours)	80	26	39	58.2	29.3	8	4.1	3.2
1,3&4	Diesel (gal)	1073	260	445	579	420	80	40	129
1,3&4	Diesel (MMBtu)	149.15	36.14	61.855	80.481	58.38	11.12	5.56	17.931
1,3&4	Natural Gas (MMBtu)	501	229	287	479	190	53	15.5	75
1,3&4	Total Fuel (MMBtu)	650.15	265.14	348.86	559.48	248.38	64.12	21.06	92.93
1,3&4	Ratio Diesel to Total Fuel	0.23	0.14	0.18	0.14	0.24	0.17	0.26	0.19
1,3&4	Ratio as multiple of 5% diesel	4.59	2.73	3.55	2.88	4.70	3.47	5.28	3.86
1,3&4	NOx Emissions (lbs.)	1752.4	768.9	980.3	1613.3	666.4	180.7	55.2	257.9
1,3&4	NOx Emissions (tons)	0.88	0.38	0.49	0.81	0.33	0.09	0.03	0.13
Totals for both Diesel Fuel Only and Dual Fuel Operations									
Units	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1,2,3&4	NOx Emissions (lbs.)	3014.2	2471.6	1913.0	3918.7	1806.9	690.9	468.4	716.5
1,2,3&4	NOx Emissions (tons)	1.51	1.24	0.96	1.96	0.90	0.35	0.24	0.36

The following table provides the NOx emission values reported by the Village of Pender that were calculated using a lower EF from AP-42 Table 3.4-1 that assumes dual fuel operations using 5% diesel and 95% natural gas.

Totals as reported by Village of Pender for both Diesel Fuel Only and Dual Fuel Operations									
Units	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1,2,3&4	NOx Emissions (tons)	1.44	1.17	0.90	1.84	0.87	0.33	0.23	0.34

The following table shows the difference between the NOx emission values that EPA calculated using a worst-case NOx EF and the NOx emissions values that the Village of Pender reported and calculated using a lower NOx EF.

Difference between EPA Totals and Village of Pender Totals for both types of Operations									
Units	**Year**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1,2,3&4	NOx Emissions (tons)	0.07	0.07	0.06	0.12	0.03	0.02	0.01	0.02

EPA considered the Village of Pender's proposed emissions limitations to keep NOx emissions below 95 tons per year by allowing each of the four engines at the facility to be operated a maximum of 1,200 hours with facility-wide fuel usage that does not exceed 433,426 gallons of diesel fuel on a 12-month rolling average.

While use of a gallon limit on the use of diesel fuel may provide flexibility for engine operations, a gallon limit alone will not prevent NOx emissions from exceeding the Title 5 major source threshold of 100 tons per year since it does not consider the heat input contribution of natural gas contributing to NOx emissions during dual fuel operations.

Although limiting the annual operating time for each engine may keep NOx emissions below the major source threshold, such a limit would provide less operational flexibility than monitoring the heat input contributions of both diesel fuel and natural gas from all engine operations to keep NOx emissions below the major source threshold (for example allowing one or more engines to operate more than 1,200 hours when one or more engines is shut down for maintenance).

EPA is proposing an annual NOx emission limit of 95 tons per year on a 12-month rolling sum basis. EPA is proposing that compliance with the annual emission limit be determined by monthly calculations of NOx emissions from all engines using the equation specified in the draft permit with inputs that include monitored fuel usage amounts for both types of fuels, heat content conversion values for both types of fuels, and the uncontrolled NOx emission factor for Diesel Fuel fired engines from AP-42 Table 3.4-1. The draft permit's annual NOx emission limit of 95 tons per year on a 12-month rolling sum basis provides flexibility for engine operations, and together with the draft permit's monitoring, reporting, and recordkeeping requirements, effectively limits the facility's potential to emit NOx to below the major source thresholds.

(B) Control technology review and Synthetic Minor Limit Determination

EPA Region 7 conducted a case-by-case control technology review that considered the following factors:

(1) Local air quality conditions.

The Pender Municipal Power Plant is in the Village of Pender, Nebraska and within the exterior boundaries of the Omaha Tribe's reservation. The Omaha Tribe's reservation occupies the southern half of Thurston County, Nebraska.

Based on monitoring data and all other available information, Thurston County is currently unclassifiable or in attainment with the national ambient air quality standards for all criteria pollutants [see Clean Air Act Section 107(d) (1) (A)]. An area is unclassifiable when there is insufficient monitoring data. Ambient air quality designations are presented in 40 CFR Part 81. Areas of the country where air pollution levels exceed the national ambient air quality standards may be designated "nonattainment." Pender Municipal Power Plant is not located in a designated nonattainment area.

(2) Typical control technology or other emissions reduction measures used by similar sources in surrounding areas.

As described in the table below, EPA Region 7 researched surrounding state government websites for similar existing non-emergency CI engine-generators that sought and obtained permits with synthetic minor limits.

Permitting Authority – *Permit Description*	**Facility**	**Description of Existing {year installed} Stationary CI Engine-Generators**	**Control Technology - *Other Emissions Reduction Measures***
Iowa DNR – *2016 Construction Permit (revised) to add oxidation catalyst*	Swiss Valley Farms Cooperative - Luana	One (1) Existing Non-Emergency 1,848 bhp {1999} Max Rated Capacity 91.8 gal/hr., Diesel Only *91.8 gal/hr. x 0.137 MMBtu/gal x 3.2 lbs./MMBtu = 40.25 lbs./hr. (hourly-uncontrolled emissions) = 176.3 tpy (yearly-uncontrolled emissions)* *Permit limit: 41 lbs./hr. of NOx (hourly-controlled emissions)* *41 lbs./hr. x 500 hrs./yr. x 1 ton/2,000lbs = 10.25 tons/yr. (potential annual emissions)*	oxidation catalyst - *Subpart ZZZZ requirements for both limited use and not limited use.* *≤ 500 operating hours per rolling twelve (12) month period.* *Monthly: (1) Determine the total hours of operation and (2) Determine annual hours of operation on rolling 12-month basis.*
Missouri DNR – *2016 Title 5 Permit with synthetic minor NOx limit for six existing engines*	City of Shelbina Power Plant	One (1) Existing Emergency & five (5) Existing Non-Emergency, not limited use (1) G1A: Emergency 4,191 HP {1981} Fairbanks-Morse 38D879029TDFS12, 27.8 MMBtu/hr, Dual Fuel (1) G2A: Non-Emergency 2,306 hp {1989} Caterpillar 3516 Genset, 13.4 MMBtu/hr, Diesel Only (3) G3A-G5A: each Non-Emergency 2,306 hp {1992} Caterpillar 3516 Genset, 13.4 MMBtu/hr, Diesel Only (1) G6A: Non-Emergency 2,628 hp {1999} Caterpillar 3516 Genset, 17.84 MMBtu/hr, Diesel Only	oxidation catalyst - *Subpart ZZZZ requirements for emergency and non-emergency.* *NOx ≤ 95.0 tons per twelve (12) consecutive months from all engines (G1A-G6A). NOx Compliance Worksheet: Diesel throughput (1,000 gal) * 604 lb/1000gal + Natural Gas throughput (MMCF) * 2,840 lb/MMCF * ton/2000lbs = Monthly NOx Emissions*
Nebraska DEQ – *2016 Class II Operating Permit*	Tecumseh Municipal Power Plant	Five (5) Existing Non-Emergency; 10,115 HP Total; 70.81 MMBtu/hr Total EP 1: 1,075 HP {1949} Cooper Bessemer JS8-DGT, Diesel Only EP 2: 2,160 HP {1968} Fairbanks Morse 38TDD8-1/8, 15.12 MMBtu/hr, Dual Fuel	oxidation catalyst - *Subpart ZZZZ requirements and each engine equipped with a non-resettable hour meter for classifying as limited use or non-limited use.*

Renewal		EP 3: 1,600 HP {1952} Fairbanks Morse 38DD8-1/8, 11.20 MMBtu/hr, Dual Fuel EP 4: 1,920 HP {1961} Fairbanks Morse 38DD8-1/8, 13.44 MMBtu/hr, Dual Fuel EP 5: 3,360 HP {1965} Fairbanks Morse 38TDD8-1/8, 23.52 MMBtu/hr, Dual Fuel	*≤ 6,456,600 kWh per any period of twelve consecutive rolling calendar months (equivalent of 95 tpy NOx) flow meters for both NG and Diesel "shall be read and recorded **daily** for each unit in operation"*
South Dakota DENR – *2015 Title 5 renewal with NOx limit for one existing engine*	North-western Energy – Yankton	Four (4) Existing Non-Emergency #1: 2,889 HP {1971} Fairbanks Morse 38TDD8-1/8, 21 MMBtu/hr, Dual Fuel #2: 3,976 HP {1971} Fairbanks Morse 38TDD8-1/8, 28.9 MMBtu/hr, Diesel Only #3: 9,177 HP {1974} Fairbanks Morse PC-2, 66.7 MMBtu/hr, Dual Fuel #4: 2,917 HP {1989} Fairbanks Morse 38TD8 V8-1/8, 21.2 MMBtu/hr, Diesel Only *Annual records - Calculate and record:* *1. Hours Units #1, #2, #3 and #4 operated;* *2. Natural gas consumed (MCF) in Units #1 and #3;* *3. Distillate oil consumed (gal) in Units #1, #2, #3 and #4;* *4. The sulfur content of the fuel consumed in Units #1, #2, #3 and #4; and* *5. NOx, SO2, and CO emitted from Unit #4, in tons.*	oxidation catalyst - *Subpart ZZZZ requirements for non-emergency limited use.* *NOx, SO2, CO for Unit #4:* *≤ 38 ton/12-month rolling total;* *≤ 67.0 lbs NOx/hr,* *≤ 1,120 hours each during any 12-month rolling period.* *Quarterly Reporting:* *1. Facility name, permit #, reference to this permit, condition, ID submittal as a quarterly report, and calendar dates covered in reporting period;* *2. Hours Unit #4 operated during each month, and during the 12-month rolling period for that month; and* *3. The sulfur content of distillate oil.*
EPA Region 7 – *2018 proposed synthetic minor permit*	Pender Municipal Power Plant	Four (4) Existing Non-Emergency; 7,120 hp Total; 50.18 MMBtu/hr Total EU1 - 2,160 hp {1967} Fairbanks M 38TDD8 1/8 Dual-Fuel, Calculated Heat Input: 15.29 MMBtu/hr EU2 - 2,880 hp {1972} Fairbanks M 38TDD8 1/8 Diesel Only, Calculated Heat Input: 20.43 MMBtu/hr EU3 - 800 hp {1952} Fairbanks M 38DD8 1/8 Dual-Fuel, Calculated Heat Input: 5.56 MMBtu/hr EU4 - 1,280 hp {1961} Fairbanks M 38DD8 1/8 Dual-Fuel, Calculated Heat Input: 8.90 MMBtu/hr	oxidation catalyst - *Subpart ZZZZ requirements for both limited use and not limited use.* *≤ 95 tons per year on a 12-month rolling sum basis.* *Monthly and 12-month rolling sum calculations of NOx emissions using a specified equation with monitored fuel usage amounts for both types of fuels, heat content conversion values for both types of fuels, and the uncontrolled NOx emission factor for Diesel Fuel fired engines from AP-42 Table 3.4-1.* *Annual Reporting.*

Each of the state government issued permits set NOx emissions limits below the major source threshold, require compliance with applicable Subpart ZZZZ requirements (including a requirement to either limit the concentration of CO in the stationary RICE exhaust or reduce CO emissions), and limit one or more of the following: hours of operation, fuel usage, and electrical power output.

The draft permit includes an annual NOx emission limit of 95 tons per year on a 12-month rolling sum basis, requires compliance with the annual emission limit be determined by monthly calculations of NOx emissions from all engines using a specified equation with monitored fuel usage amounts for both types of fuels, heat content conversion values for both types of fuels, and the uncontrolled NOx emission factor for Diesel Fuel fired engines from AP-42 Table 3.4-1. Together with the draft permit's monitoring, reporting, and recordkeeping requirements, the annual NOx emission limit of 95 tons per year on a 12-month rolling sum basis establishes legally and practically enforceable limitations on the facility's potential to emit NOx to below major source thresholds.

The draft permit also requires compliance with all applicable Subpart ZZZZ requirements that will either limit the concentration of CO in each Engine-Generator exhaust to 23 ppmvd at 15 percent O2 or reduce CO emissions by 70 percent or more.

The draft permit requires monthly calculations of NOx emissions. Should EPA determine that calculated actual emissions are approaching or exceeding an emission limit, or should EPA determine that the permittee is failing to maintain adequate monitoring and recordkeeping requirements, EPA may revise, reopen, revoke or reissue the permit to require additional control technologies and emission reduction measures.

(3) Anticipated economic growth in the area.

Pender Municipal Power Plant is in the Village of Pender, Nebraska and within the exterior boundaries of the Omaha Tribe's reservation. The Omaha Tribe's reservation occupies the southern half of Thurston County, Nebraska. The Village of Pender is located an estimated 80 miles northwest of Omaha, Nebraska and approximately 35 miles southwest of South Sioux City, Nebraska.

In conducting the control technology review, EPA considered the anticipated growth rate of the source. Considering economic development information for the Village of Pender available at http://penderthurston.com, the Permittee's history of operating each Engine-generator under 100 hours annually, and the Permittee's recent decision to reclassify the existing Engine-generators as "limited use," under the Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines, EPA does not anticipate that any emissions increases resulting from economic growth in the area will pose unique or additional impacts on air quality in the foreseeable future that might warrant more stringent requirements to control emissions than those contained in the proposed permit.

(4) Cost-effective emission reduction alternatives.

The proposed emission limitations are consistent with control technologies or other emissions reduction measures used by similar sources in surrounding areas with the same attainment status for all criteria pollutants as where the source is located. EPA believes that, because these control measures are currently used by other similar sources in surrounding areas, they are technically and economically feasible, and cost effective.

(C) Potential and Allowable Emissions

Engine-generators			
Emission Unit	Flow Rate *(gallons/hour)*	Hourly Heat Input Capacity *(MMBtu/hr)*	Annual Heat Input Capacity *(MMBtu/yr)*
EU-1-EG	110	15.29	133,940.4
EU-2-EG	147	20.43	178,966.8
EU-3-EG	40	5.56	48,705.6
EU-4-EG	64	8.9	77,964
Total	**361**	**50.18**	**439,576.8**

Hourly Heat Input calculated using flow rate from application (gallons/hour) multiplied by 0.139 MMBtu/gallon conversion factor for diesel fuel as specified in 2012 URGE test included in permit application.

Annual Heat Input is Hourly Heat Input multiplied by 8,760 hours/year.

Potential emissions are calculated using the total heat input capacity from all engines (see table above) multiplied by an emission factor for each regulated NSR pollutant (shown in the table below). Without the permit limitations, the engines have a potential to emit 703 tons per year of NOx and 255 tons per year of CO.

By limiting NOx emissions from the engines to 95 tons per year, emissions of all other pollutants are also limited to below major source thresholds. Allowable emissions of all other pollutants are calculated using the Limited Annual Heat Input required to keep NOx emissions below 95 ton/yr:

Limited Annual Heat Input = 95 ton/yr ÷ 3.2 lb/MMBtu * 2000 lbs/ 1 ton = **59,375 MMBtu/yr**

With the permit limitations to keep NOx emissions below 95 tons/yr, and 70% reduction in CO to comply with MACT ZZZZ, the engines have a potential to emit 95 tons per year of NOx and 10.33 tons per year of CO. The table below shows the potential and allowable emissions calculated for engine-generators along with the major and minor source thresholds.

Engine-generators							
Regulated NSR Pollutant	**Emission Factor * *(lb/MMBtu)***	**AP-42 Emission Factor * Source**	**Potential Emissions ** *(lbs/hr)***	**Potential Emissions ** *(tons/yr)***	**Allowable Emissions *(tons/yr)***	**Minor NSR Source Threshold *(tons/yr)***	**Major Source Threshold *(tons/yr)***
NOx	3.2	Table 3.4-1 for diesel fuel	160.58	703.32	95.00	10	100 or 250
CO	1.16	Table 3.4-1 for dual fuel	58.21	254.95	10.33 ***	10	100 or 250
VOC	0.2	Table 3.4-1	10.04	43.96	5.94	5	100 or 250

		for dual fuel					
PM	0.062	Table 3.4-2 for diesel fuel	3.11	13.63	1.84	10	100 or 250
PM_{10}	0.0573	Table 3.4-2 for diesel fuel	2.88	12.59	1.70	5	100 or 250
$PM_{2.5}$	0.0556	Table 3.4-2 for diesel fuel	2.79	12.22	1.65	3	100 or 250
SO_2	0.00152 ****	Table 3.4-1 for diesel fuel	0.08	0.33	0.05	10	100 or 250

** Emission Factors from AP-42 Chapter 3.4 Large Stationary Diesel and All Stationary Dual Fuel Engines, Tables 3.4-1 and 3.4-2 (10/1996) - using the largest uncontrolled emission factor (diesel or dual fuel) to calculate the worst-case scenario*

*** Potential Emissions for each pollutant are calculated using Heat Input Capacities multiplied by EF for each pollutant*

**** Proposed Annual Emissions for CO calculated considering 70% reduction from compliance with MACT ZZZZ:*

*1.16 lb/MMBtu * 59,375 MMBtu/yr = 34.44 tons/yr*
*34.44 tons/yr * 0.3 = 10.33 tons/yr*

***** SO2 EF derived using* ***Equation: 1.01 S1 = 0.00****152, assuming* ***S1****= 0.0015 (per MACT ZZZZ the maximum sulfur content for NR diesel fuel is 15 ppm)*

Unit 5	Diesel Storage Tank	Year Installed 2016	5,000-gallon Capacity

Given the low volatility of diesel fuel and assuming the new storage tank is well designed, operated and maintained, potential emissions are expected to be relatively low. The Limited Annual Heat Input is the equivalent of 427,158 gallons of diesel fuel usage per year:

59,375 MMBtu/yr * 1 gal/0.139 MMBtu = 427,158 gals/year

Allowable VOC emissions from the diesel storage tank are 17.94 lbs/yr (0.00897 tons/year), calculated using Limited Annual Heat Input equivalent of 427,158 gals/year multiplied by the sum of the VOC emission factors provided in the 2016 emissions inventory report (0.04 lb/1,000 gal for breathing loss and 0.002 lb/1,000 gal for working loss).

Allowable VOC emissions = 427,158 gal/year * 0.042 lb/1,000 gal.
= 17.94 lbs./yr * 1 ton/2,000 lbs.
= 0.00897 tons/year

Unit 6	Water Heater	Year Installed *Unknown*	Heat Input Capacity 0.25 MMBtu/hr	Natural Gas Throughput Capacity 2.19 MMscf/yr

Potential emissions from the water heater are provided in the table below.

Water Heater		
Pollutant	**Emission Factor** (lbs./MMscf)	**Potential emissions** (tons/yr)
NO_x	100	0.1095
CO	84	0.09198
VOC	5.5	0.006023
PM	1.9	0.002081
PM_{10}	7.6	0.008322
$PM_{2.5}$	7.6	0.008322
SO_x	0.6	0.000657

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1 and 1.4-2

*0.25 MMBtu/hr * [1 MMscf/1,000 MMBtu] = 0.00025 MMscf/hr*

*0.00025 MMscf/hr * [8760 hr/yr] = 2.19 MMscf/yr*

(D) Other EPA Regulations

General Permit Option for Stationary Compression Ignition (CI) Engines

On October 14, 2016, EPA finalized general permit options in Indian country for new or modified true and synthetic minor sources. The general permit option for stationary CI engines requires that each affected non-emergency CI engine, excluding nonroad mobile engines, be model year 2014 or later and be certified by the manufacturer to the applicable Tier 4 standards equipped with add-on controls for CO and NOx (and certified by the manufacturer to the applicable standards in 40 CFR 1039.101 through 1039.104, for all pollutants, for the same model year and maximum engine power). Since each of the stationary non-emergency CI engines at Pender Power Plant are existing and are not undergoing modification as defined in 40 CFR 49.152(d), those engines do not qualify for coverage under a general permit.

New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP)

NSPS regulations promulgated under CAA Section 111 and NESHAP regulations promulgated under CAA Section 112 may be applicable to the emission units at the Pender Municipal Power Plant independent of this permit. EPA Region 7 reviewed these regulations as part of this synthetic minor permitting action in developing emission limitations that assure that each affected emissions unit will comply with all requirements of 40 CFR parts 60, 61 and 63 that apply to the unit. For this synthetic minor permit, EPA Region 7 considered the following regulations:

40 CFR Part 60, Subpart Dc - New Source Performance Standards for Small Industrial-Commercial- Institutional Steam Generating Units
This subpart does not apply to any boilers or hot water heaters with a maximum heat input capacity of less than 10 MMBtu/hour. Since the small natural gas fired 250,000 BTU boiler does not generate steam and does not have a maximum heat input capacity of more than 10 MMBtu/hour, this subpart does not apply.

40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
This subpart is applicable to owners and operators of stationary CI internal combustion engines (ICE) and other persons who construct, reconstruct, or modify an engine after July 11, 2005. Subpart IIII is not applicable because each of the existing engines were constructed prior to July 11, 2005. If any of the engines are modified or reconstructed in the future as described in Part 60, Subpart A, then these engines would become subject to this subpart.

40 CFR Part 60, Subpart Kb: Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.
This subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids for which construction,

reconstruction, or modification is commenced after July 23, 1984. Since the diesel fuel storage tank currently in use at the facility has a capacity of 5,000 gallons (18.93 cubic meters), this subpart does not apply.

40 CFR Part 63, Subpart JJJJJJ - NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources

As provided by §63.11195(f), a hot water heater is not subject to this subpart. Per §63.11237, hot water boilers (i.e., not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in the definition of a hot water heater. The 250,000 Btu/hr natural gas fired boiler meets the definition of a hot water heater, therefore this subpart does not apply.

40 CFR Part 63, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ applies to existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE) located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand [§63.6590(a)]. The four engines are existing stationary RICE since they were constructed before June 12, 2006 [§63.6590(a)(1)(iii)]. As an existing stationary CI RICE located at an area source of HAP emissions, the applicable emission limitations, operating limitations, and other requirements were required to be complied with no later than May 3, 2013 [§63.6595(a)].

The Initial Notification form, received April 10, 2012, identified the four engines as "non-limited use" engines. To comply with the emission standards in Table 2d of 40 CFR part 63, subpart ZZZZ, an oxidation catalyst was installed on each of the four engines by the end of 2012. The initial performance testing of the engines was conducted on April 18, 2013 to demonstrate compliance with the outlet concentration limit of < 23 ppm @ 15% O_2, or a 70% or greater reduction of CO emissions as specified in Subpart ZZZZ Table 2d-3. A report of the April 18, 2013 test results demonstrating compliance was received on June 10, 2013.

In a letter received on March 30, 2016, the facility notified EPA that the engines would be reclassified from "non-limited use" engines to "limited use" engines and indicated that should the engines be required to operate for more than 100 hours per year in the future, the facility will notify EPA Region 7 within 15 days to reclassify the engines as "non-limited use" and will conduct performance testing within 90 days of exceeding 100 hours per year of operation, unless the previous performance testing was conducted less than three years prior to the exceedance of the 100 hours per year threshold. In that case, the testing will be conducted within three years of the previous testing. Also, if the engines exceed 100 hours per year of operation, compliance reporting will be done semi-annually instead of annually.

As defined in §63.6675, a limited use stationary RICE means any stationary RICE that operates less than 100 hours per year. Since at least 2009, the facility has reported that each engine has been operated less than 100 hours per calendar year.

The proposed permit requires that the four engines comply with all applicable Subpart ZZZZ emission limitations and operating limitations, as well as, all applicable Subpart ZZZZ Compliance, Testing, Notifications, Reports, and Records requirements.

TSD Appendix A provides a detailed list of the Subpart ZZZZ requirements that are applicable to each of the four engines based on the following descriptive categories:

existing non-emergency,
non-black start,
CI stationary RICE,
with a site rating of more than 500 brake HP,
with a displacement of less than 30 liters per cylinder,
that uses diesel fuel,
that is not equipped with a closed crankcase ventilation system,
that is located at an area source of HAP emissions,
that is complying with the requirement to limit or reduce the concentration of CO and using an oxidation catalyst
and using a Continuous Parametric Monitoring System (CPMS),
not using a Continuous Emissions Monitoring System (CEMS).

Per 63.6675 definition of Spark Ignition: Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

If a dual-fuel engine is operated as a spark ignition engine, a reduced set of Subpart ZZZZ requirements would apply.

<u>40 CFR Part 63, Subpart A – General Provisions</u>

This subpart applies because each engine is subject to NESHAP Subpart ZZZZ. Table 8 of Subpart ZZZZ specifies which of the General Provisions apply.

If the source should add or change equipment or change processes such that a NSPS or NESHAP subpart becomes an applicable requirement, then it is the source's obligation to comply with that subpart and applicable requirements whether or not they are identified in this permitting action

(E) Other Federal Requirements

(1) Endangered Species Act (ESA) Impacts.

The EPA is obligated to consider the impact that a federal project may have on listed species or critical habitats. Section 7 of the ESA [16 U.S.C. 1531 et seq.] outlines the procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitats. Section 7 of the ESA requires the EPA, as a federal agency, to use its authority to conserve listed endangered and threatened species. To support this requirement, section 7 (a) (2) of the ESA requires the EPA to ensure that an agency action, such as the issuance of air construction permits, is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat for such species.

The proposed CAA Synthetic Minor Source permit action covers four existing Engine-Generators installed between 1952 and 1972. The permit action also includes is a 5,000-gallon diesel storage tank that has replaced three 12,000-gallon diesel storage tanks in 2016. The 5,000-gallon tank installation did not increase emissions and did not expand the footprint of the existing facility. The facility occupies approximately 13,000 square feet of land in a developed area two blocks north of Main Street and includes two existing buildings with a total footprint of approximately 6,000 square feet.

The permit action will have the beneficial effect of controlling air pollution by establishing emissions limits below major source thresholds for all non-exempt operations currently at the facility.

In complying with its duty under ESA, the EPA, as the action agency, examined the potential effects on listed species and designated critical habitat relating to issuing a CAA synthetic minor source permit in Indian country.

Permit Request

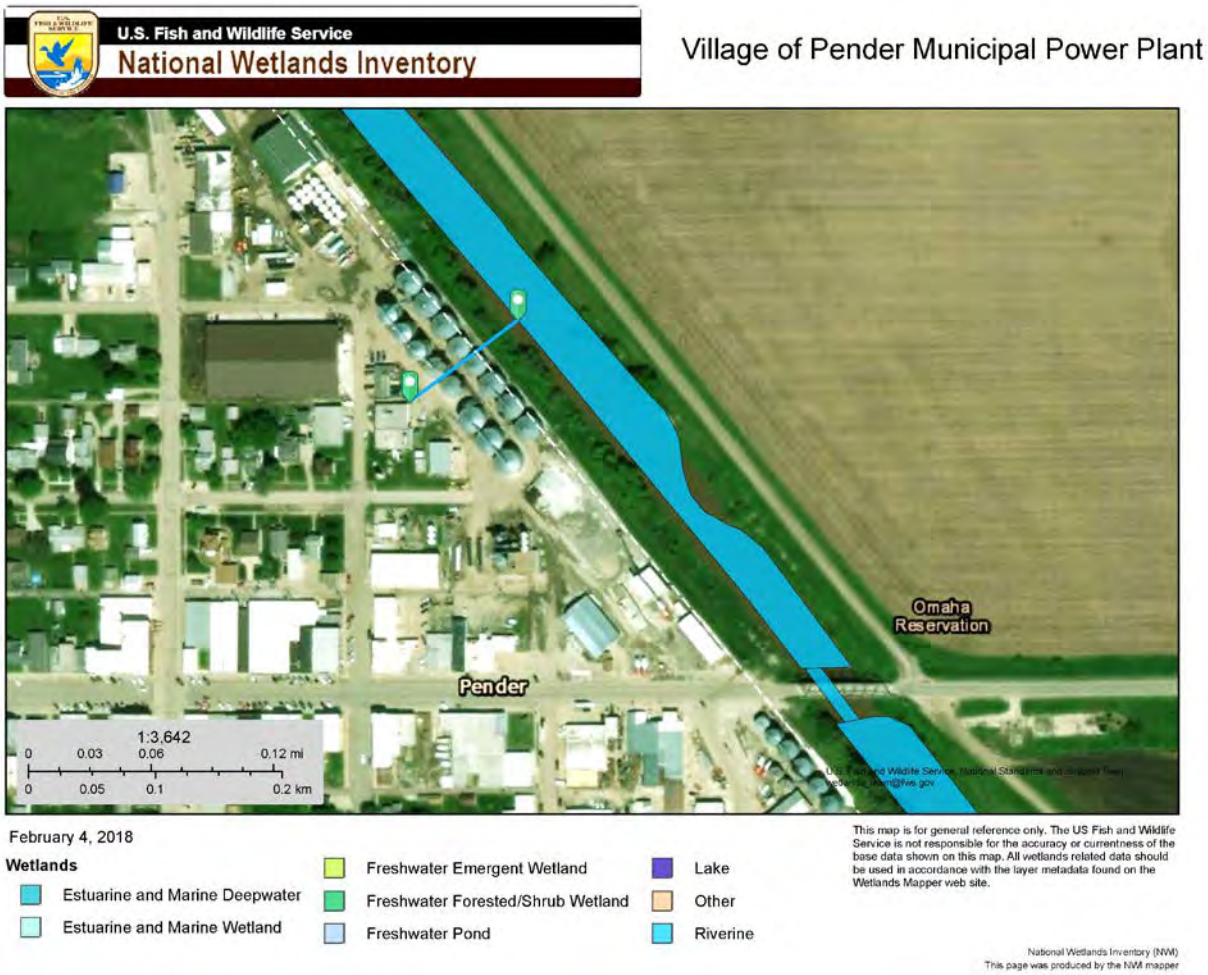
The EPA received a CAA permit application from the Village of Pender Municipal Power Plant, requesting voluntarily restrictions on its potential to emit to become a synthetic minor source. The facility is in the Village of Pender, Nebraska and within the exterior boundaries of the Omaha Tribe's reservation. The Omaha Tribe's reservation occupies the southern half of Thurston County, Nebraska.

EPA intends to issue a synthetic minor source permit, which includes permit requirements based on the tribal minor NSR provisions, for all non-exempt emissions units at the facility for which information has been received, as of the date of the permit issuance. If this facility were allowed to operate without the control equipment required by the proposed permit, it would have potential emissions of air pollutants at levels triggering major source Prevention of Significant Deterioration (PSD) and Title V permitting. The applicant is requesting permit conditions to establish legally and practically enforceable restrictions on NOx and CO emissions to avoid PSD

and Title V major source permitting requirements found at 40 CFR Parts 52 and 71, respectively. The proposed permit includes monitoring, recordkeeping and reporting requirements necessary to assure compliance with each limit. To provide legally and practically enforceable permit conditions to reduce potential emissions to levels below the major source thresholds for PSD and Title V requirements, the proposed permit requires monthly calculations of emissions.

Hydrology

The facility is located approximately 20 straight line miles west of the Missouri River. Surface drainage from the facility grounds travels toward Logan Creek Dredge with a grain storage facility in between. Logan Creek Dredge is classified as Riverine R2UBGx and is approximately 260 straight line feet northeast from the northeast corner of the facility. From that location, Logan Creek Dredge is approximately 60 miles upstream of the Elkhorn River. A National Wetlands Inventory map providing an aerial view of the Village of Pender Municipal Power Plant facility showing surrounding structures and measured distance to nearby Logan Creek Dredge is provided below:



Threatened and Endangered Species

The EPA accessed U.S. Fish and Wildlife Service (FWS) websites for information on threatened and endangered species and designated critical habitat for those species. FWS maintains a website titled Environmental Conservation Online System (http://ecos.fws.gov/ecp/) that provides access to databases for:

1. Threatened and endangered species that may be present within the proposed permit action area and

2. Designated critical habitat for threatened and endangered species.

The EPA accessed the FWS Information, Planning, and Conservation System (IPaC) database (http://ecos.fws.gov/ipac) to identify species listed as threatened and endangered that have been documented as being present in facility area, and received the official species list from the FWS Nebraska Ecological Services Field Office on February 9, 2018. There are no critical habitats within the facility area.

The official species list from FWS stated that the following threatened or endangered species may be found in the facility area:

Least Tern (*Sterna antillarum*)
Listing Status: Endangered

Piping Plover (*Charadrius melodus*)
Listing Status: Threatened

Pallid Sturgeon (*Scaphirhynchus albus*)
Listing Status: Endangered

Western Prairie Fringed Orchid *(Platanthera praeclara)*
Listing Status: Threatened

Northern Long-eared Bat (*Myotis septentrionalis*)
Listing Status: Threatened

<u>Least Tern</u>
Listing Status: Endangered
Effects Determination: No Effect

The interior least tern is migratory and its breeding range extends from Texas to Montana and from eastern Colorado and New Mexico to northern Indiana. They were declared endangered in 1985 (50 Federal Register 21792; May 28, 1985.) Interior least terns nest in riparian areas with sparsely vegetated sand and gravel bars within a wide, unobstructed river channel or salt flats along lake shorelines, at higher elevations away from the water's edge. The primary food is small fishes, but it also eats shrimp and occasionally other invertebrates. The least tern is known to use the Missouri River corridor for nesting and as a migratory corridor. The facility is located approximately 20 straight line miles west of the Missouri River. Given the location of the facility within a developed industrial area, apparent lack of habitat within the facility area, the proposed permitting action for the operation of existing facility will have no effect on the least tern.

Piping Plover
Listing Status: Threatened
Effects Determination: No Effect

The piping plover was declared threatened in 1985 (50 Federal Register 50733; December 11, 1985.)

It is a small shorebird that inhabits barren sand and gravel shores of rivers and lakes. The main foods taken are freshwater invertebrates washed up on shore, terrestrial, and benthic invertebrates. The Northern Great Plains population of piping plovers nest on the shorelines and islands of alkali (salty) lakes in North Dakota and Montana. They nest on sandbar islands and reservoir shorelines along the Missouri River and reservoirs in Montana, North Dakota, South Dakota, and Nebraska. In Nebraska, they nest on the Platte River system, Niobrara, Loup, and Elkhorn Rivers. The facility is located approximately 20 straight line miles west of the Missouri River. Given the location of the facility within a developed industrial area, apparent lack of habitat within the facility area, the proposed permitting action for the operation of existing facility will have no effect on the piping plover.

Pallid Sturgeon
Listing Status: Endangered
Effects Determination: No Effect

The pallid sturgeon was federally listed as an endangered species on September 6, 1990. In Nebraska, the pallid sturgeon is found in the Missouri and lower Platte Rivers. Floodplains, backwaters, chutes, sloughs, islands, sandbars, and main channel waters formed the large river ecosystem that provided macrohabitat requirements for the pallid sturgeon, a species that is associated with diverse aquatic habitats. The expected occurrence of the pallid sturgeon is in the Lower Platte River and Missouri River. The Missouri River is approximately 20 straight line miles away from the facility, and the Lower Platte is even farther away from the facility. Thus, no potential habitat occurs within the facility area.

Western Prairie Fringed Orchid (WPFO)
Listing Status: Threatened
Effects Determination: No Effect

The western and eastern prairie fringed orchids were added to the U.S. List of Endangered and Threatened Wildlife and Plants on September 28, 1989. The WPFO, federally listed as threatened, inhabits tall-grass calcareous silt loam or sub-irrigated sand prairies. In eastern Nebraska, they are found in upland prairies and loess soils. In central and northeast Nebraska, they occur in wet prairies and meadows.

The location of the facility is within a developed industrial area. The facility occupies approximately 13,000 square feet of land in a developed industrial area two blocks north of Main Street and includes two buildings with a total footprint of approximately 6,000 square feet. The recent tank installation did not increase emissions. The footprint of the existing

facility was not expanded and the tank installation would likely not have involved removing or disturbing native vegetation. Therefore, the proposed permit action is considered to have no effect on the WPFO.

Northern Long-eared Bat (NLEB)
Listing Status: Threatened
Effects Determination: No Effect

On April 2, 2015, the USFWS listed the northern long-eared bat as a threatened species. NLEB are very useful because they feed on spiders, beetles, and flying insects (such as mosquitoes). The primary factor threatening the northern long-eared bat is white-nose syndrome. However, because populations of the bat are depressed by this disease, human activities that were not significant before may be so now. In the final listing rule for the northern long-eared bat, USFWS states that critical habitat is not determinable at this time and plans to propose and determine appropriate critical habitat within one year of the final listing. NLEB have been found in 39 states, including Nebraska. However, no potential habitat appears to occur within the facility area.

EPA Determination of ESA Impacts

The CAA Synthetic Minor Source permit action will have the beneficial effect of controlling air pollution by establishing emissions limits below major source thresholds for all non-exempt operations currently at the facility. Based on information we have researched and reviewed, the EPA has concluded that the proposed permit action will have "no effect" on the Least Tern, Piping Plover, Pallid Sturgeon, Western Prairie Fringed Orchid, and Northern Long-Eared Bat. As the lead federal agency for Section 7(a)(2) compliance and given our determination that the proposed action will have "no effect" on listed species or critical habitat, EPA is not consulting with the FWS Nebraska Ecological Services Field Office. A Federal agency is not required to consult with the FWS if it determines an action will not affect listed species or critical habitat.

The EPA gathered information on listed species from the following sources:

1. Thompson, Bruce C., Jerome A. Jackson, Joannna Burger, Laura A. Hill, Eileen M. Kirsch and Jonathan L. Atwood. 1997. Least Tern (Sternula antillarum), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/290 doi:10.2173/bna.290
2. U.S. Fish and Wildlife Service, 2009. *Piping Plover 5-Year Review: Summary and Evaluation*: http://www.fws.gov/northeast/endangered/PDF/Piping_Plover_five_year_review_and_summary.pdf
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(2) National Environmental Policy Act (NEPA) Review.

Under Section 793(c) of the Energy Supply and Environmental Coordination Act of 1974, no action taken under the Clean Air Act shall be deemed a major federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969. The proposed permitting action is taken under regulations implementing the Clean Air Act and is therefore exempt from the NEPA. See Section 7(c) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 793(c) (1).

(3) National Historic Preservation Act (NHPA).

Section 106 of the NHPA requires that the EPA take into account the effect of any action undertaken by the EPA, such as issuing air construction permits, on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places. The EPA consults with the state historical preservation officer (SHPO), the tribal historical preservation officer (THPO), and members of the public to receive and consider their views and concerns about historic preservation during projects and activities that are considered covered undertakings. Since the Omaha Tribe has assumed the SHPO's responsibilities for Section 106 under Section 101(d) (2) of NHPA, thereby having a THPO, the EPA is consulting with the THPO in lieu of the SHPO.

The Village of Pender Municipal Power Plant is located at 205 North 3rd St. (NE Corner of Ivan St. & N 3rd St.) Pender, Nebraska 68047. The location is two blocks north of Main

Street. According to the Thurston County Assessor's Office, Lots 3 and 4, Block 9 is the exact plot location within the Village of Pender.

The EPA considered whether issuing the proposed synthetic minor permit might affect historic properties. EPA searched the National Park Service National Register of Historic Places website http://focus.nps.gov/nrhp and found six National Register Sites listed for Thurston County. Two sites listed are within the Village of Pender.

First Thurston County Courthouse located at 400-412 Main Street is approximately 500 straight line feet southwest of the Village of Pender Municipal Power Plant.

Thurston County Courthouse (second) located between 5th & 6th Streets is approximately 1,000 straight line feet southwest of the Village of Pender Municipal Power Plant.

The proposed CAA Synthetic Minor Source permit action covers four existing Engine-Generators installed between 1952 and 1972. The facility is operated as a peak/standby plant. Electrical power can be generated quickly during peak electrical energy demands or during emergencies. The Village has a capacity lease agreement with Municipal Energy Agency of Nebraska (MEAN) for 3,955 kW.

The permit action also includes a 5,000-gallon diesel storage tank that replaced three 12,000-gallon diesel storage tanks in 2016. The 5,000-gallon tank installation did not increase emissions and did not expand the footprint of the existing facility.

The proposed permit action does not authorize any emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. The permit action will have the beneficial effect of controlling air pollution by establishing emissions limits below major source thresholds for all non-exempt operations currently at the facility. EPA considers the permit action the type of activity that does not have the potential to cause effects on historic properties.

(4) Environmental Justice (EJ).

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies. Meaningful involvement means that people have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; their concerns will be considered in the decision-making process; and the decision makers seek out and facilitate the involvement of those potentially affected. EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn, and work.

EPA has developed an EJ mapping and screening tool called EJSCREEN. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports. The Pender Municipal Power Plant is in the Village of Pender, Nebraska and within the exterior boundaries of the Omaha Tribe's reservation. EPA reviewed screen reports for the half-mile and one-mile radius around the facility, as well as one for the census block group.

EJ areas of concern are determined by examining various environmental, demographic, and economic indicators. With EJSCREEN, EPA primarily looks at the EJ indicators. EPA uses an 80th percentile threshold to evaluate the potential for EJ concerns in a community, so if an area of interest exceeds the 80th percentile for one or more of the 11 EJ indicators, EPA considers that area to have a high potential for EJ concerns. In this case none of the EJ indicators exceed the 80th percentile for this location. So, EPA would not consider this location as one that would have a high potential for EJ concerns.

The EPA is seeking input regarding possible EJ concerns and whether this proposed permit action, establishing emissions limits below major source thresholds for the operation of existing equipment at the facility, might cause a disproportionately high environmental or public health impact to a low income or minority population.

(5) Consultation with the Omaha Tribe of Nebraska and Iowa.

As part of EPA Region 7's federal program implementation and oversight responsibilities, EPA Region 7's policy is to consult on a government-to-government basis with federally recognized tribal governments. EPA Region 7 consulted with the Omaha Tribe regarding the issuance of this synthetic minor source permit for the Village of Pender Municipal Power Plant via written correspondence dated April ???, 2018. The tribal point of contact for the consultation provided information to the agency supporting the issuance of this permit. See administrative record xxx.

(6) Public participation requirements.

EPA Region 7 is soliciting public input to be considered prior to final decision-making regarding the issuance of the proposed synthetic minor source permit consistent with the 40 CFR § 49.157 Public participation requirements.

EPA Region 7 is providing notice of the proposed permit action in the Pender Times. EPA Region 7 is making relevant information, for example, the draft permit and support materials, including this TSD, readily available at the Omaha Tribe Environmental Office, at the EPA Regional Office, and the EPA website: http://www.epa.gov/caa-permitting/draft-synthetic-minor-tribal-air-permit-Pender Municipal Power Plant.

The comment period for the Public Notice (PN) of this draft permit starts with the date noted on the PN and ends 30 calendar days later. The PN requests comments from interested individuals or organizations. A written request for a public hearing on the draft permit may also be submitted. Any request for a hearing must state the nature of the issues that the requestor proposes to raise at the hearing. In accordance with 40 CFR § 157 (c) (1), the EPA

will consider all comments submitted before the end of the public comment period. If there is a significant degree of public interest in a draft permit, a public hearing will be held on the contents of the draft permit. See 40 CFR § 157(c) (4). The final permit will be issued in accordance with the provisions of 40 CFR § 159.

TSD Appendix A – Subpart ZZZZ Requirements

Subpart ZZZZ Requirements for Pender Power Plant
§63.6585 Am I subject to this subpart?
§63.6585 - applies: owner or operator of a stationary RICE at an area source of HAP emissions
§63.6590 What parts of my plant does this subpart cover?
§63.6590 (a) (1) (iii) - applies to affected existing stationary RICE at an area source of HAP emissions constructed before June 12, 2006.
§63.6595 When do I have to comply with this subpart?
§63.6595 (a) - *** Already Completed before May 3, 2013 deadline *** If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.
§63.6595 (c) - If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.
§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
§63.6603 Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.
§63.6603 (a) If you own/operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart & the operating limitations in Table 2b to this subpart that apply to you.
§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?
§63.6604 (a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.
§63.6605 What are my general requirements for complying with this subpart?
§63.6605 (a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.
§63.6605 (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
§63.6612 * Already Completed before May 3, 2013 deadline *** By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate ... an existing stationary RICE located at an area source of HAP emissions?**
§63.6612 **** Already Completed before May 3, 2013 deadline *** If you own or operate an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.
§63.6612 (a) **** Already Completed before May 3, 2013 deadline *** You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).
§63.6615 When must I conduct subsequent performance tests?
§63.6615 If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.
§63.6620 What performance tests and other procedures must I use?
§63.6620 What performance tests and other procedures must I use? (a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.
§63.6620 (b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart.
§63.6620 (d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e) (3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.
§63.6620 (e) (1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement: $\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq. 1)$ **Where:** **Ci = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,** **Co = concentration of CO, THC, or formaldehyde at the control device outlet, and** **R = percent reduction of CO, THC, or formaldehyde emissions.**

§63.6620 (e) (2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO2 concentration is measured in lieu of oxygen concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_O = \frac{0.209\ F_d}{F_C} \quad (Eq.\ 2)$$

Where:
Fo = Fuel factor based on the ratio of oxygen volume to the ultimate CO2 volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is oxygen, percent/100.
Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu).
Fc = Ratio of the volume of CO2 produced to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu)

(ii) Calculate the CO2 correction factor for correcting measurement data to 15 percent O2, as follows:

$$X_{CO2} = \frac{5.9}{F_O} \quad (Eq.\ 3)$$

Where:
XCO2 = CO2 correction factor, percent.
5.9 = 20.9 percent O2—15 percent O2, the defined O2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O2 using CO2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad (Eq.\ 4)$$

Where:
Cadj = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O2.
Cd = Measured concentration of CO, THC, or formaldehyde, uncorrected.
XCO2 = CO2 correction factor, percent.
%CO2 = Measured CO2 concentration measured, dry basis, percent.

§63.6620 (i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

§63.6625 (b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section.

§63.6625 (b) (1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

§63.6625 (b) (1) (i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

§63.6625 (b) (1) (ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

§63.6625 (b) (1) (iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

§63.6625 (b) (1) (iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

§63.6625 (b) (1) (v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

§63.6625 (b) (2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site specific monitoring plan.

§63.6625 (b) (3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

§63.6625 (b) (4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

§63.6625 (b) (5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

§63.6625 (b) (6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

§63.6625 (g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed

crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements.
§63.6625 (g) (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
§63.6625 (g) (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
§63.6625 (h) If you operate a ~~new, reconstructed, or~~ existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables ~~1a, 2a, 2c, and~~ 2d to this subpart apply.
§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?
§63.6630 (a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.
§63.6630 (b) During the initial performance test, you must establish each operating limitation in Table~~s 1b and~~ 2b of this subpart that applies to you.
§63.6630 (c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.
§63.6635 How do I monitor and collect data to demonstrate continuous compliance?
§63.6635 (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
§63.6635 (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
§63.6635 (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.
§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?
§63.6640 (a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table~~s 1a and 1b, Tables 2a and~~ 2b~~, Table 2c,~~ and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
§63.6640 (b) You must report each instance in which you did not meet each emission limitation or operating limitation in ~~Tables 1a and 1b, Table~~s 2a and **2b~~, Table 2c,~~** and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.
§63.6645 What notifications must I submit and when?
§63.6645 (a) (2) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate… (2) An existing stationary RICE located at an area source of HAP emissions.
§63.6645 (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
§63.6645 (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
§63.6645 (h) (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).
§63.6650 What reports must I submit and when?
§63.6650 (a) You must submit each report in Table 7 of this subpart that applies to you.
§63.6650 (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
§63.6650 (b) (1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.
§63.6650 (b) (2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.
§63.6650 (b) (3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
§63.6650 (b) (4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
§63.6650 (b) (5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii) (A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

§63.6650 (b) (6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.
§63.6650 (b) (7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.
§63.6650 (b) (8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
§63.6650 (b) (9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
§63.6650 (c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.
§63.6650 (c) (1) Company name and address.
§63.6650 (c) (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
§63.6650 (c) (3) Date of report and beginning and ending dates of the reporting period.
§63.6650 (c) (4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.
§63.6650 (c) (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
§63.6650 (c) (6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
§63.6650 (e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section. (1) The date and time that each malfunction started and stopped. (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. (3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8). (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period. (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE. (9) A brief description of the stationary RICE. (10) A brief description of the CMS. (11) The date of the latest CMS certification or audit. (12) A description of any changes in CMS, processes, or controls since the last reporting period.
§63.6655 What records must I keep?
§63.6655 (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), and (b)(1) through (b)(3) ~~and (c)~~ of this section.
§63.6655 (a) (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
§63.6655 (b) (1) Records described in §63.10(b)(2)(vi) through (xi). (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.
§63.6655 (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
§63.6660 In what form and how long must I keep my records?
§63.6660 (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
§63.6660 (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
§63.6660 (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each

occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).
§63.6665 What parts of the General Provisions apply to me?
Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.
§63.6670 Who implements and enforces this subpart?
§63.6675 What definitions apply to this subpart?
Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for … Existing CI Stationary RICE >500 HP
Table 2b - As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for existing CI stationary RICE >500 HP: **2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst** **a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and** **b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.**
Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions
Table 2d - As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions: **3. Non-Emergency, non-black start CI stationary RICE >500 HPs** **a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O2; or** **b. Reduce CO emissions by 70 percent or more.**
Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests
Table 3 - As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements: **4. For each existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE, complying with the requirement to Limit or reduce CO emissions and not using a CEMS, must Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.** **5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE, complying with the requirement to Limit or reduce CO emissions and not using a CEMS, must Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.**

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, **63.6620**, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the Requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Select the sampling port location and the number/ location of traverse points at the inlet and outlet of the control device; and		(a) For CO and O2 measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)ac (heated probe not necessary)	b) Measurements to determine O2 must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005)abc (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O2, dry basis.
3. Stationary RICE	a. limit the concentra-tion of	i. Select the sampling port location and the number/ location of		(a) For formaldehyde, CO, O2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in

	formalde-hyde or CO in the stationary RICE exhaust	traverse points at the exhaust of the stationary RICE; and		diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)a (heated probe not necessary)	a) Measurements to determine O2 concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the station-ary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03a	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formaldehyde at the exhaust of the station-ary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03a, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the station-ary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005)ac, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03a	(a) CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[b]You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[79 FR 11290, Feb. 27, 2014]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the Requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed nonemergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625 (b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625 (b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the catalyst inlet temperature data according to §63.6625 (b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the catalyst inlet temperature data according to §63.6625 (b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.
[78 FR 6715, Jan. 30, 2013]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing nonemergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing nonemergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).

[78 FR 6719, Jan. 30, 2013]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.
As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation - Subject of citation - Applies to subpart (Yes/No) - Explanation

§63.1 General applicability of the General Provisions **Yes**.
§63.2 Definitions **Yes** Additional terms defined in §63.6675.
§63.3 Units and abbreviations **Yes**.
§63.4 Prohibited activities and circumvention **Yes**.
§63.5 Construction and reconstruction **Yes**.
§63.6(a) Applicability **Yes**.
§63.6(b)(1)-(4) Compliance dates for new and reconstructed sources **Yes**.
§63.6(b)(5) Notification **Yes**.
§63.6(b)(6) [Reserved]
§63.6(b)(7) Compliance dates for new and reconstructed area sources that become major sources **Yes**.
§63.6(c)(1)-(2) Compliance dates for existing sources **Yes**.
§63.6(c)(3)-(4) [Reserved]
§63.6(c)(5) Compliance dates for existing area sources that become major sources **Yes**.
§63.6(d) [Reserved]
§63.6(e) Operation and maintenance **No.**
§63.6(f)(1) Applicability of standards **No.**
§63.6(f)(2) Methods for determining compliance **Yes**.
§63.6(f)(3) Finding of compliance **Yes**.
§63.6(g)(1)-(3) Use of alternate standard **Yes**.
§63.6(h) Opacity and visible emission standards **No.** *Subpart ZZZZ does not contain opacity or visible emission standards.*
§63.6(i) Compliance extension procedures and criteria **Yes**.
§63.6(j) Presidential compliance exemption **Yes**.
§63.7(a)(1)-(2) Performance test dates **Yes** Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3) CAA section 114 authority **Yes**.
§63.7(b)(1) Notification of performance test **Yes** Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2) Notification of rescheduling **Yes** Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c) Quality assurance/test plan **Yes** Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d) Testing facilities **Yes**.
§63.7(e)(1) Conditions for conducting performance tests **No.** Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2) Conduct of performance tests and reduction of data **Yes** Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3) Test run duration **Yes**.
§63.7(e)(4) Administrator may require other testing under section 114 of the CAA **Yes**.
§63.7(f) Alternative test method provisions **Yes**.
§63.7(g) Performance test data analysis, recordkeeping, and reporting **Yes**.
§63.7(h) Waiver of tests **Yes**.
§§63.8(a)(1) Applicability of monitoring requirements **Yes** Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§§63.8(a)(2) Performance specifications **Yes**.
§63.8(a)(3) [Reserved]
§63.8(a)(4) Monitoring for control devices **No.**
§63.8(b)(1) Monitoring **Yes**.
§63.8(b)(2)-(3) Multiple effluents and multiple monitoring systems **Yes**.
§63.8(c)(1) Monitoring system operation and maintenance **Yes**.
§63.8(c)(1)(i) Routine and predictable SSM No
§63.8(c)(1)(ii) SSM not in Startup Shutdown Malfunction Plan **Yes**.
§63.8(c)(1)(iii) Compliance with operation and maintenance requirements No
§63.8(c)(2)-(3) Monitoring system installation **Yes**.
§63.8(c)(4) Continuous monitoring system (CMS) requirements **Yes** Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5) COMS minimum procedures **No** Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8) CMS requirements **Yes** Except that subpart ZZZZ does not require COMS.
§63.8(d) CMS quality control **Yes**.
§63.8(e) CMS performance evaluation **Yes** Except for §63.8(e)(5)(ii), which applies to COMS. Except that §63.8(e) only applies as specified in §63.6645.
§63.8(f)(1)-(5) Alternative monitoring method **Yes** Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6) Alternative to relative accuracy test **Yes** Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g) Data reduction **Yes** Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a) Applicability and State delegation of notification requirements **Yes**.

§63.9(b)(1)-(5) Initial notifications **Yes** Except that §63.9(b)(3) is reserved. Except that §63.9(b) only applies as specified in §63.6645.
§63.9(c) Request for compliance extension **Yes** Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d) Notification of special compliance requirements for new sources **Yes** Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e) Notification of performance test **Yes** Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f) Notification of visible emission (VE)/opacity test **No** Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1) Notification of performance evaluation **Yes** Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2) Notification of use of COMS data **No** Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3) Notification that criterion for alternative to RATA is exceeded **Yes** If alternative is in use. Except that §63.9(g) only applies as specified in §63.6645.
§63.9(h)(1)-(6) Notification of compliance status **Yes** Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations.
§63.9 (h)(4) is reserved. Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i) Adjustment of submittal deadlines **Yes**.
§63.9(j) Change in previous information **Yes**.
§63.10(a) Administrative provisions for recordkeeping/reporting **Yes**.
§63.10(b)(1) Record retention **Yes** Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v) Records related to SSM **No.**
§63.10(b)(2)(vi)-(xi) Records **Yes**.
§63.10(b)(2)(xii) Record when under waiver **Yes**.
§63.10(b)(2)(xiii) Records when using alternative to RATA **Yes** For CO standard if using RATA alternative.
§63.10(b)(2)(xiv) Records of supporting documentation **Yes**.
§63.10(b)(3) Records of applicability determination **Yes**.
§63.10(c) Additional records for sources using CEMS **Yes** Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1) General reporting requirements **Yes**.
§63.10(d)(2) Report of performance test results **Yes**.
§63.10(d)(3) Reporting opacity or VE observations **No** Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4) Progress reports **Yes**.
§63.10(d)(5) Startup, shutdown, and malfunction reports **No.**
§63.10(e)(1) and (2)(i) Additional CMS Reports **Yes**.
§63.10(e)(2)(ii) COMS-related report **No** Subpart ZZZZ does not require COMS.
§63.10(e)(3) Excess emission and parameter exceedances reports **Yes**. Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4) Reporting COMS data **No** Subpart ZZZZ does not require COMS.
§63.10(f) Waiver for recordkeeping/reporting **Yes**.
§63.11 Flares **No.**
§63.12 State authority and delegations **Yes**.
§63.13 Addresses **Yes**.
§63.14 Incorporation by reference **Yes**.
§63.15 Availability of information **Yes**.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

APR 1 3 2018

Mr. Mike Wolfe Sr., Chairman
Omaha Tribe of Nebraska and Iowa
P.O. Box 368
100 Main Street
Macy, Nebraska 68039

RE: Notification of Consultation and Coordination on EPA Region 7 Issuance of Synthetic Minor New Source Review Clean Air Act Permit for Village of Pender Municipal Power Plant

Dear Chairman Wolfe:

This letter offers the opportunity for the Omaha Tribe to consult and coordinate with the U.S. Environmental Protection Agency Region 7 in regard to the proposed issuance of a Tribal Minor New Source Review Clean Air Act permit for the Village of Pender Municipal Power Plant located within the exterior boundaries of the Omaha Tribe's Reservation. Region 7 is the permitting authority and is currently processing the permit application for the facility. This invitation to consult with the Omaha Tribe regarding a pre-draft permit is based on the Agency's consultation policy. See the EPA's website for an electronic copy of the EPA Policy on Consultation and Coordination with Indian Tribes (www.epa.gov/tribal/consultation/consultpolicy.htm).

The Clean Air Act permitting action is for the Village of Pender Municipal Power Plant and will be in accordance with the Federal Tribal New Source Review CAA air pollution control permitting program (40 CFR Part 49). This stationary source is requesting a permit with federally enforceable synthetic minor air pollutant emission limits. The permit provides the facility with an opportunity to avoid the major source air pollution control permitting requirements of the Prevention of Significant Deterioration and Title V Operating Permit CAA programs (40 CFR Parts 52 and 71). The permit has air emission restrictions that replace those agreed to by the owner pursuant to the March 7, 1999, Potential to Emit Transition Policy for Part 71 Implementation in Indian Country (50% Potential to Emit Transition Policy). Pursuant to 40 CFR 49.158, existing sources previously operating under a synthetic minor mechanism such as the 1999 Potential to Emit transition policy, now must obtain a synthetic minor permit.

The EPA invites you and any others you would designate to participate in a conference call to discuss the permitting process. Unless we hear from you or your office sooner with a designated tribal representative, we will call Tim Grant, Environmental Director, **at 10:00 am on April 25, 2018**. If we hear back from Tim Grant before April 25, 2018, we can offer an alternative date and time for this call. During this call, we will more clearly share our goals for the permitting process, describe the pre-draft permit, seek your input regarding consultation, and schedule an opportunity for you to review/comment on the pre-draft permit and any necessary follow-up conference calls. In order to ensure the CAA permit is timely issued, the EPA Region 7's consultation and coordination process with tribes for this action will be completed by May 30, 2018.

As a standard part of the EPA Region 7 permit procedures, the EPA plans to regularly coordinate and communicate with you and the local community. We will keep the tribal government informed and will seek your input on this permit action. Also, given this facility is non-tribally owned and operated, we will be regularly communicating with the permittee.

The EPA requests that you reply in writing to this letter within the next 10 days indicating whether or not the Omaha Tribe would like to consult with the EPA on this pre-draft permit. If the tribe elects to consult, we request that you provide the name of a tribal representative who will serve as the point of contact for planning the consultation and any policy that the tribe may have regarding consultations with the EPA Region 7.

The official EPA Region 7 contact person for this consultation and coordination process is Bob Webber, (913) 551-7251 or webber.robert@epa.gov. Please do not hesitate to contact him should you have any questions or concerns about this letter and invitation to consult. Thank you very much for your attention to this matter.

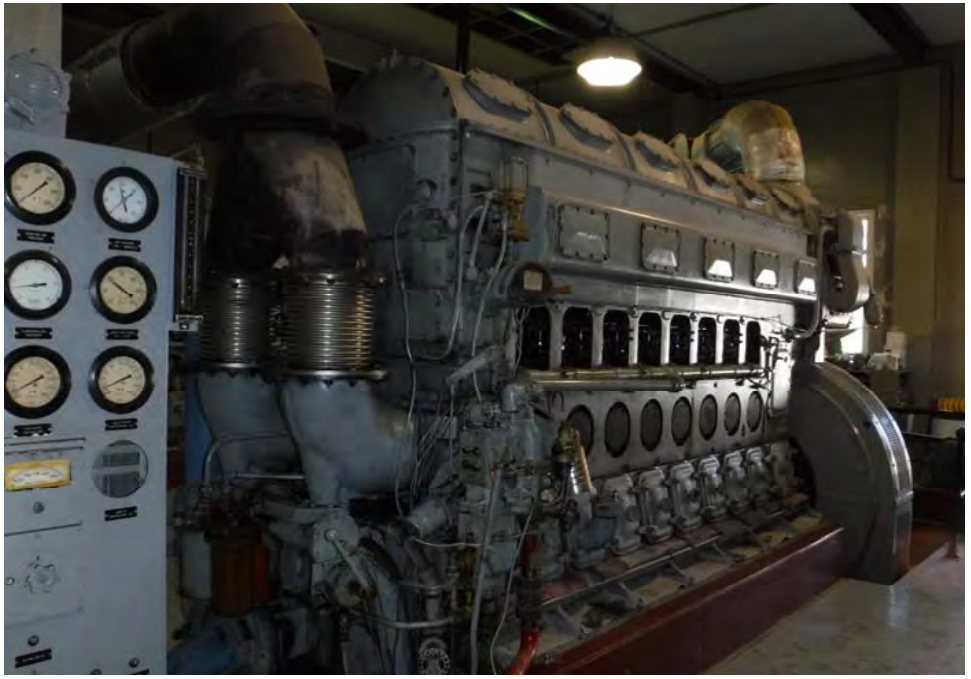
Sincerely,

Becky Weber
Director
Air and Waste Management Division

cc: Tim Grant, Environmental Director
Omaha Tribe of Nebraska and Iowa

Patrick Bustos, Director and Senior Regional Indian Program Manager


JACKET WATER TEMPERATURE-IN
RAW WATER TEMPERATURE
JACKET WATER TEMPERATURE-OUT
LUBE OIL TEMPERATURE-IN
LUBE OIL TEMPERATURE-OUT




LUBE OIL PRESSURE IN — OUT
SCAVENGING AIR PRESSURE
JACKET WTR. PRESS. IN — OUT
CROSBY
JACKET WATER TEMPERATURE-IN
RAW WATER TEMPERATURE
JACKET WATER TEMPERATURE-OUT


ALARM SWITCH
FUEL OIL LEVEL
LUBE OIL TEMPERATURE
JACKET WATER PRESSURE
JACKET WATER TEMPERATURE
LUBE OIL PRESSURE
RAW WATER TEMPERATURE
PRE LUBE PUMP
45 sec.


KILOWATTHOUR-OUT


DOLLINGER
CORPORATION
MODEL
ELEMENT Nº
MWP
PSI.
NAT'L. BOARD
SHT'L. TK.
HD. TK.
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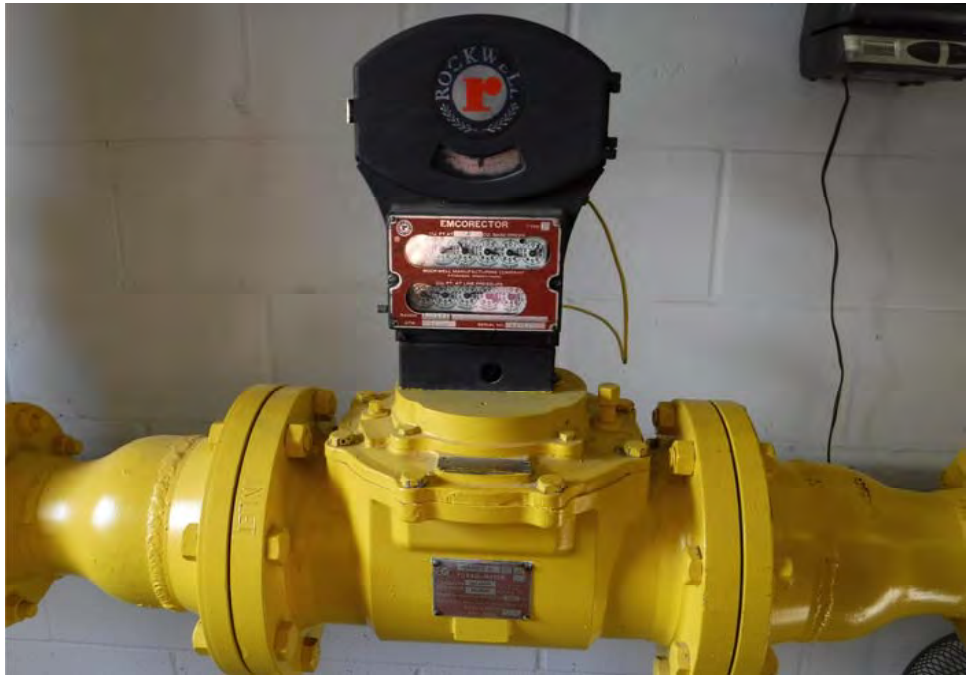
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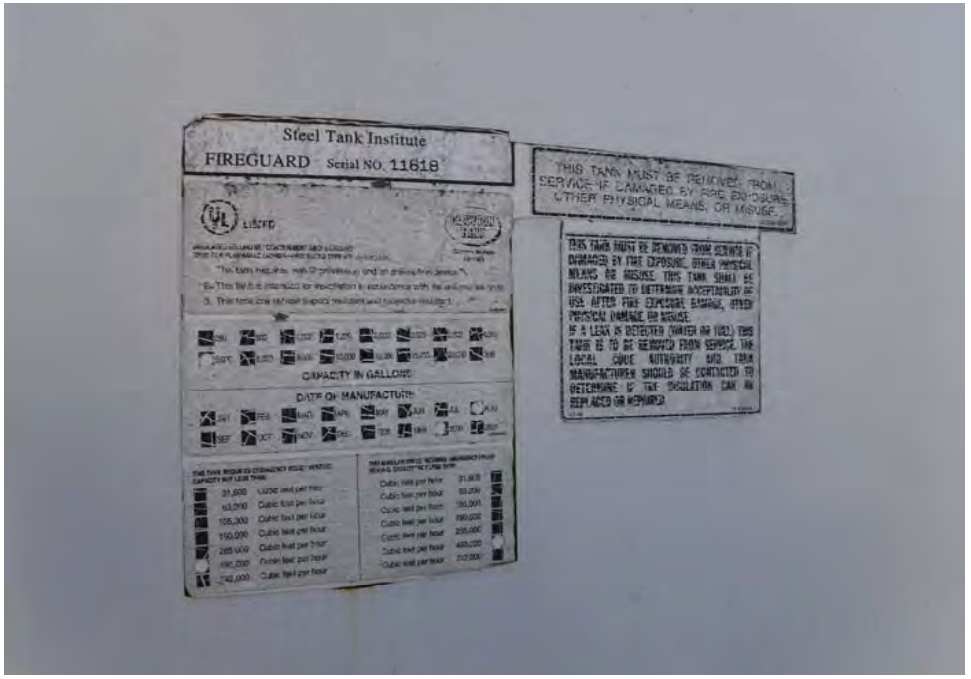
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UL LISTED
CAPACITY IN GALLONS
DATE OF MANUFACTURE
THIS TANK MUST BE REMOVED FROM SERVICE IF DAMAGED BY FIRE EXPOSURE, OTHER PHYSICAL MEANS, OR MISUSE.
THIS TANK MUST BE REMOVED FROM SERVICE IF DAMAGED BY FIRE EXPOSURE, OTHER PHYSICAL MEANS OR MISUSE. THIS TANK SHALL BE INVESTIGATED TO DETERMINE ACCEPTABILITY OF USE AFTER FIRE EXPOSURE DAMAGE, OTHER PHYSICAL DAMAGE OR MISUSE.
IF A LEAK IS DETECTED (WATER OR VAPOR) THIS TANK IS TO BE REMOVED FROM SERVICE. THE LOCAL CODE AUTHORITY AND TANK MANUFACTURER SHOULD BE CONTACTED TO DETERMINE IF THE INSULATION CAN BE REPLACED OR REPAIRED


AQUATOWER
COOLING TOWER


AQUATOWER


GPI


GPI
MR 5-30N FUEL METER


CRC
GALLON
GPI
The Proven Choice for Fuel Transfer Solutions
MR 5-30N FUEL METER
TOTAL
MADE IN THE U.S.A.


CRC
GPI
MR 5-30N FUEL METER


GALLON
GPI
The Proven Choice for Fuel Transfer Solutions
MR 5-30 FUEL METER
TOTAL
MADE IN THE U.S.A.
Do Not Use To Measure Liquid For Resale


ENGINE 2
GALLON
GPI
MR 5-30N FUEL METER
TOTAL


ENGINE 1
GALLON
GPI
The Proven Choice for Fuel Transfer Solutions
MR 5-30N FUEL METER
TOTAL


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GPI
The Proven Choice for Fuel Transfer Solutions
MR 5-30N FUEL METER
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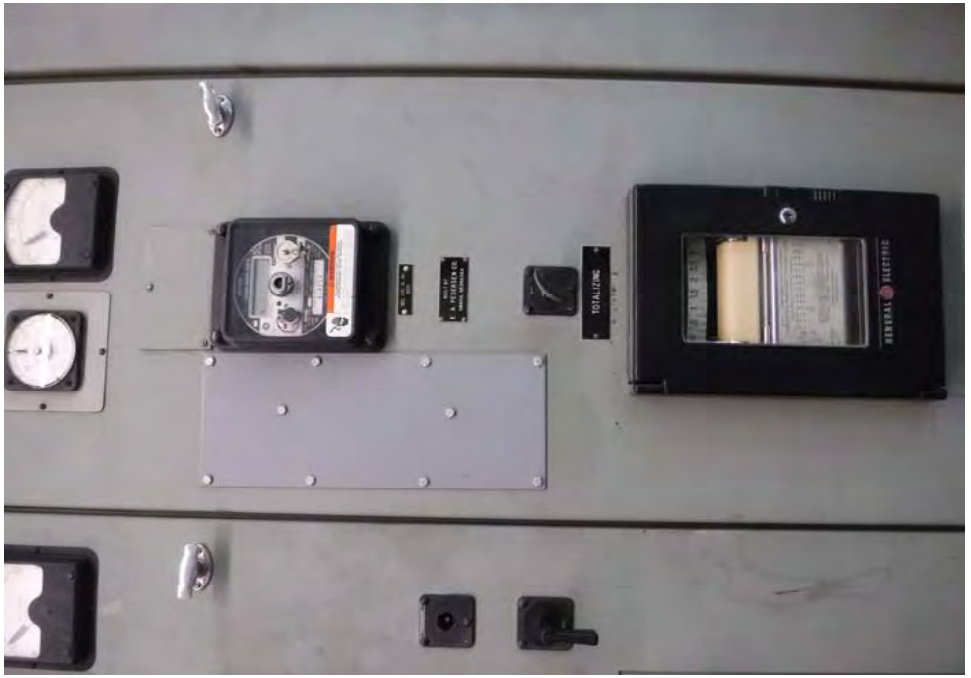
GPI
The Proven Choice for Fuel Transfer Solutions
MR 5-30N FUEL METER
0 0 0 1 5 3
TOTAL
MADE IN THE U.S.A.
Do Not Use To Measure Liquid For Resale


E&CA


TANK 4
E&CA


E&CA
MOTOR 1
FUEL RETURN
E&CA


GALLONS
INCHES
4054
7.51
PRECISION DIGITAL
HIGH LEVEL ALARM
LOW LEVEL ALARM


TOTALIZING
GENERAL ELECTRIC


4055
7.53
ALARM RESET


TOTALIZING
DO NOT CLOSE


Comm-Ready
TYPE ES-3
NEBRASKA PUBLIC POWER DISTRICT
419213
93 718 306
WARNING
HAZARDOUS VOLTAGE. CAN CAUSE
SEVERE PERSONAL INJURY OR DEATH.


HOURS
GENERAL ELECTRIC
MODEL 8KT9 D 3 VOLTS 115 CY 60
MADE IN U.S.A.


Comm-Ready
TYPE ES-3
NEBRASKA PUBLIC POWER DISTRICT
419213
93 718 306
WARNING
HAZARDOUS VOLTAGE. CAN CAUSE
SEVERE PERSONAL INJURY OR DEATH.


GENERATOR #1
1550 KW


Current
Differential
System
Basler
BE1-CDS


HOURS
00198
1/10
GENERAL ELECTRIC
MADE IN U.S.A.


KILOWATTHOURS
MULTIPLY BY 100
TYPE DS -65
CLASS 10
120 V
4WY 60~
GENERAL ELECTRIC
30 820 121


DO NOT CLOSE


HOURS
1672
GENERAL ELECTRIC
MODEL 8KT9
VOLTS
CY
MADE IN U.S.A.


GENERATOR # 3
560 KW


GENERATOR # 1
1550 KW


HOURS
1672.6
GENERAL ELECTRIC
MODEL 8KTS
VOLTS
CY
MADE IN U.S.A.


GENERATOR #4
900 KW


GENERATOR #3
560 KW

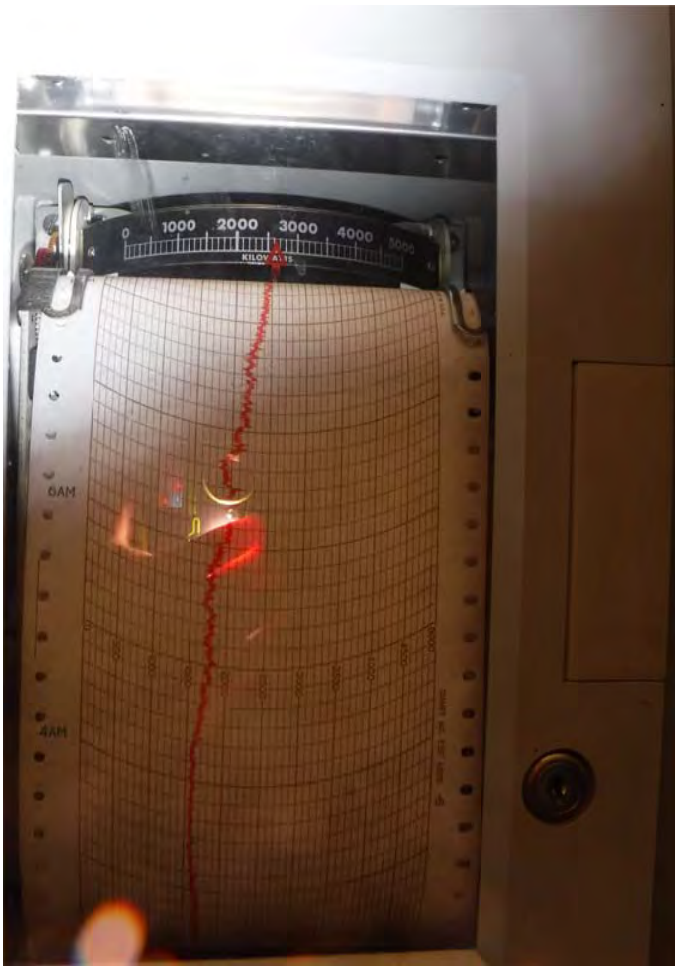

GENERATOR #5
560 KW


KILOWATTHOURS
MULTIPLY BY 100
TWO STATOR WATTHOUR METER
PRI V 2400
PRI Kh 2160
PRI A 300
TYPE DS -65
PTR 2400/120
CTR 300/5
CLASS 10
120 V
4WY 60~
Y
GENERAL ELECTRIC
CAT. NO. 700X66G43
TEST AMPERES 2.5
Kh 1.8
30 820 120


5 CYL
HOURS
GENERAL ELECTRIC
MODEL 8KT9 D 3 VOLTS 115 CY 60
MADE IN U.S.A.


01156
HOURS


DANGER

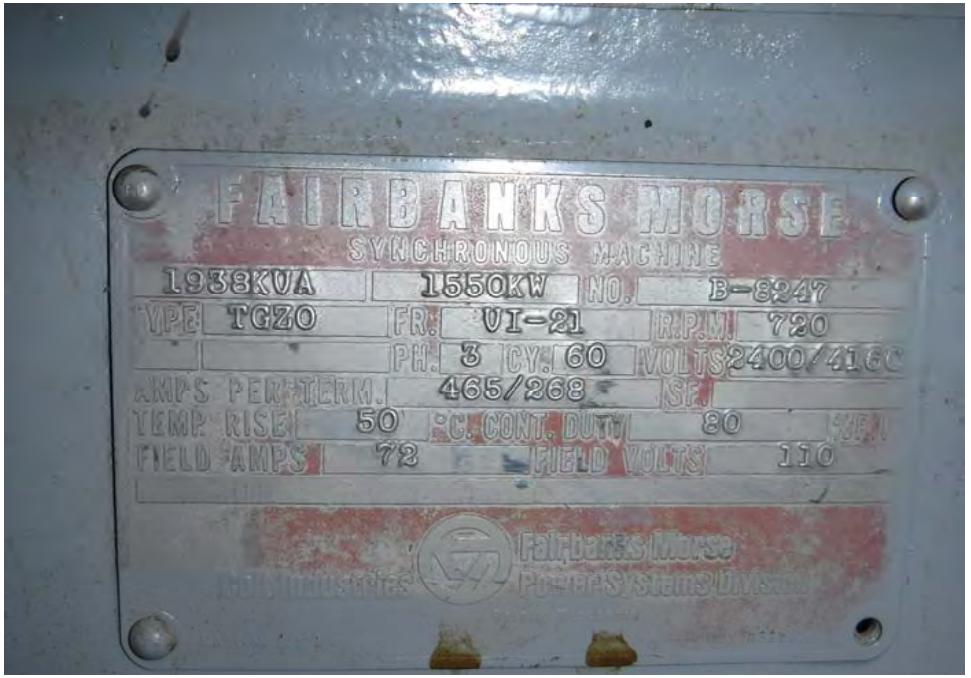

1000
2000
3000
4000
6AM
4AM

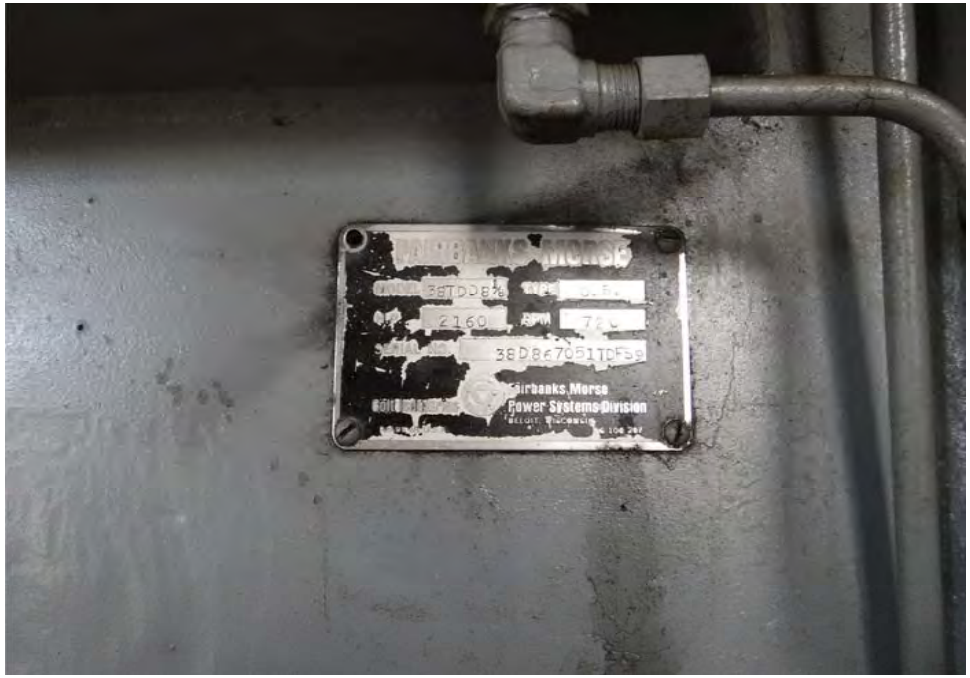

INTER NECTION
3750 KVA

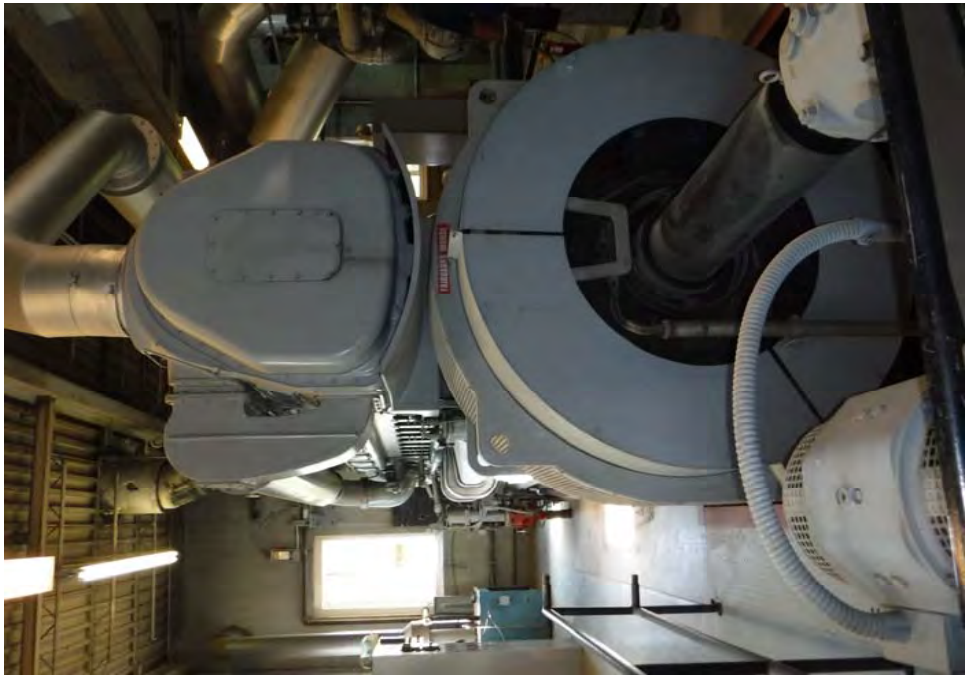

1000
2000
3000
0
4000
1000
1500
5000
A C
KILOWATTS

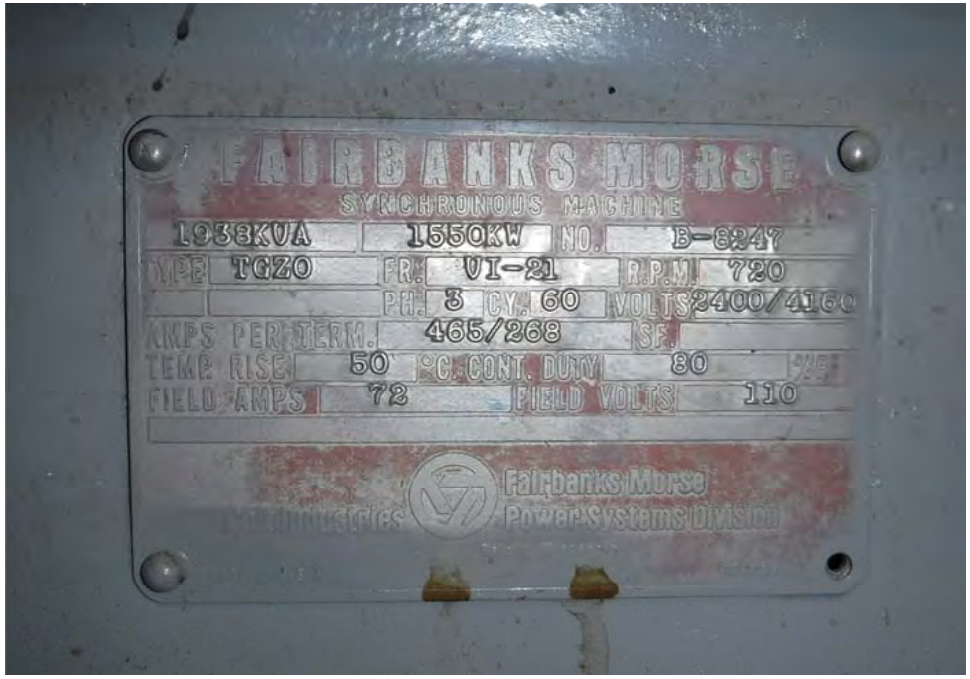

KILOWATTS
AMPERES
KILOVARS
UECO
Utility Equipment
Company

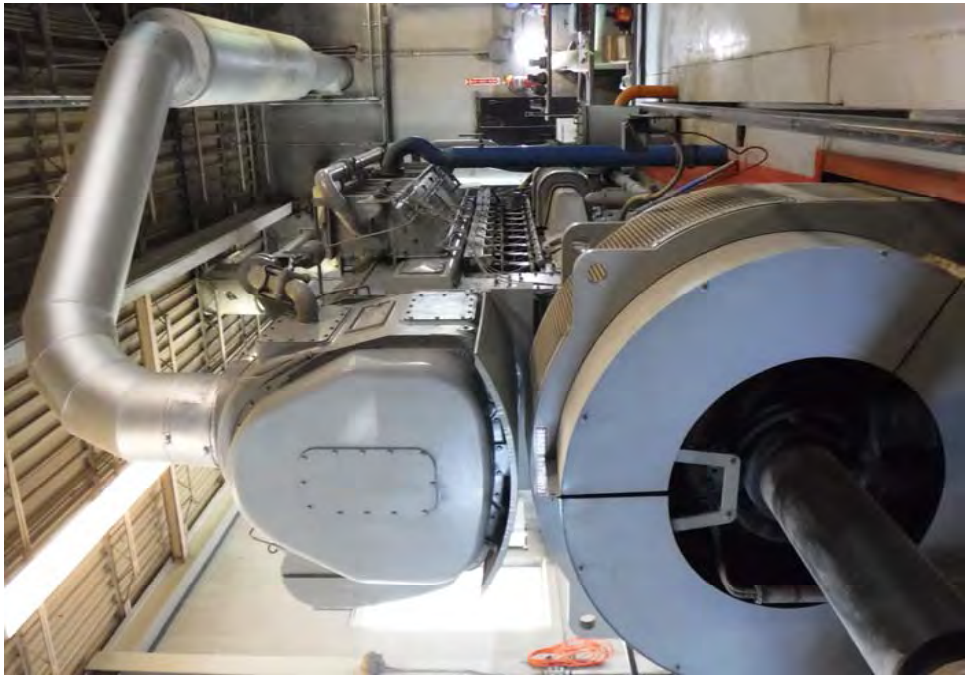

FAIRBANKS MORSE
38TDD8 1/8
TYPE O.P.
2160
RPM 720
38D867051TDFS9
Fairbanks Morse
Power Systems Division
BELOIT, WISCONSIN


FAIRBANKS MORSE
SYNCHRONOUS MACHINE
1938KVA
1550KW
NO. B-8247
TYPE TGZO
FR. VI-21
R.P.M. 720
PH. 3 CY. 60
VOLTS 2400/4160
AMPS PER TERM. 465/268
SF
TEMP. RISE 50 °C. CONT. DUTY 80
FIELD AMPS 72
FIELD VOLTS 110



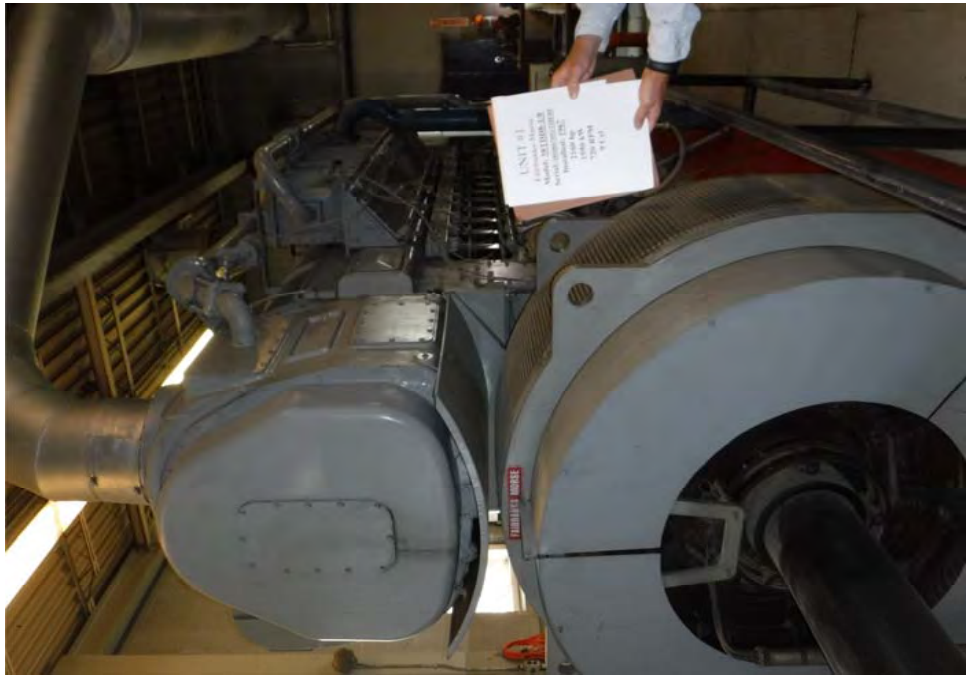



FAIRBANKS MORSE
SYNCHRONOUS MACHINE
1938KVA 1550KW NO. B-8247
TYPE TGZO FR. VI-21 R.P.M. 720
PH. 3 CY. 60 VOLTS 2400/4160
AMPS PER TERM. 465/268 S.F.
TEMP. RISE 50 °C. CONT. DUTY 80 °F
FIELD AMPS 72 FIELD VOLTS 110
Fairbanks Morse
Power Systems Division

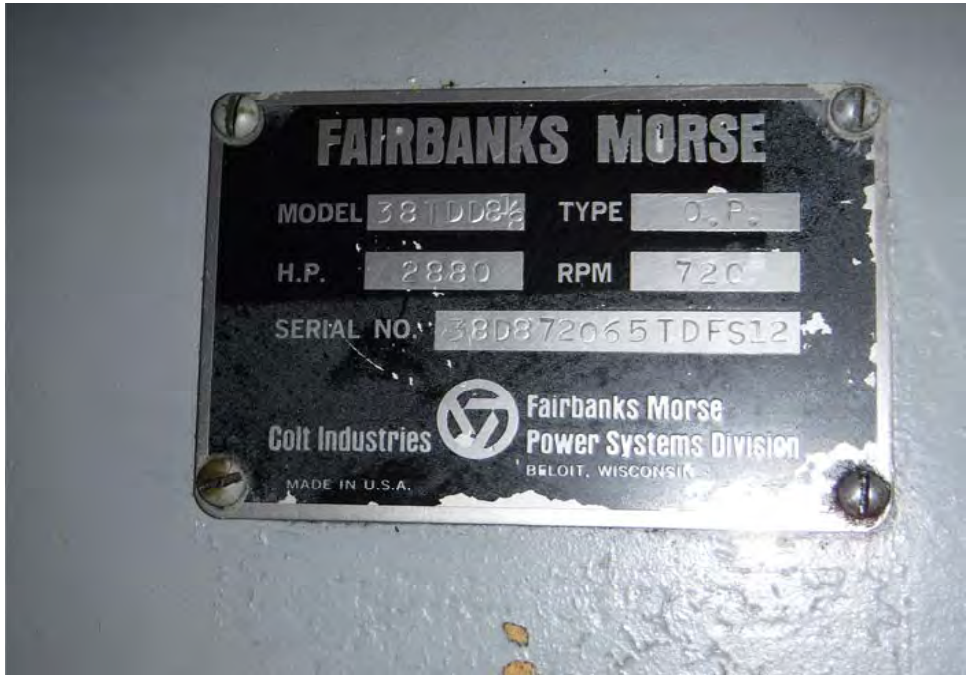



UNIT #2
Fairbanks-Morse
Model: 38TDD8-1/8
Serial: 380728651DIS13
Installed: 1972
2880 hp
2070 kW
720 RPM
12 Cyl


FAIRBANKS MORSE
SYNCHRONOUS MACHINE
2070 KW 2588 KVA NO. 503932 R1
TYPE T8GZJ FR. 956-30 R.P.M. 720
PH. 3 CY. 60 VOLTS 2400/4160
AMPS PER TERM. 622 / 359 S.F.
TEMP. RISE 60 °C. CONT. DUTY 80 P.F.
FIELD AMPS 118 FIELD VOLTS 125
CLASS B INSUL. 40 DEG. C MAX. AMB.
Colt Industries
Fairbanks Morse
Power Systems Division




UNIT #2
Fairbanks-Morse
Model: 38TDD8-1/8
Serial: 380728651DIS13
installed: 1972
2880 hp
2070 kW
720 RPM
12 Cyl


FAIRBANKS MORSE
MODEL 38TDD8½
TYPE O.P.
H.P. 2880
RPM 720
SERIAL NO. 38D872065TDFS12
Colt Industries
Fairbanks Morse
Power Systems Division
BELOIT, WISCONSIN
MADE IN U.S.A.


FAIRBANKS MORSE


MIRATECH
MIRAMONITOR

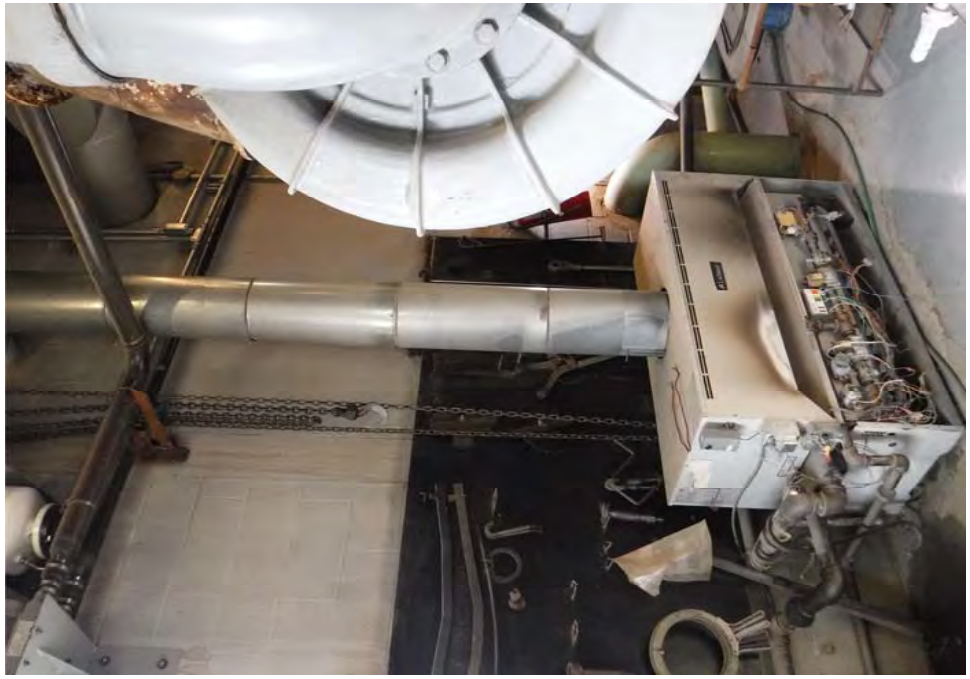

FUEL OIL PRESSURE BEFORE — AFTER
SCAVENGING AIR PRESSURE
GAS PRESSURE LINE — MANIFOLD
pyrometer
alnor
LUBE OIL PRESSURE IN — OUT
JACKET WTR. PRESS IN — OUT

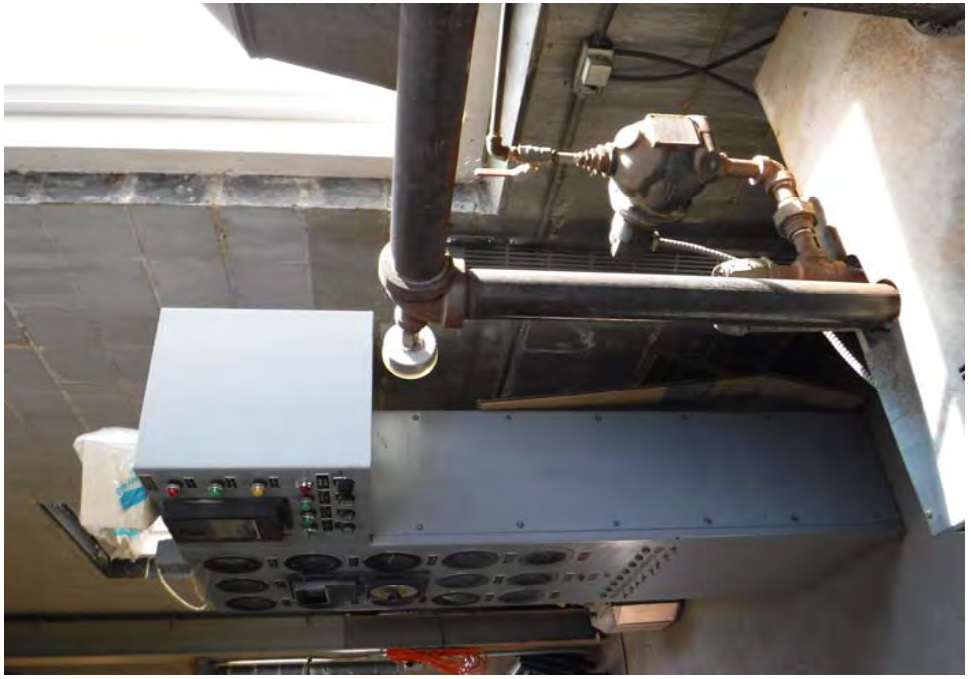

HIGH
NORMAL
LOW
PRE LUBE PUMP
INTERCOOLER PUMP
INTERCOOLER FAN
VACUUM PUMP
START
20 Sec
Before

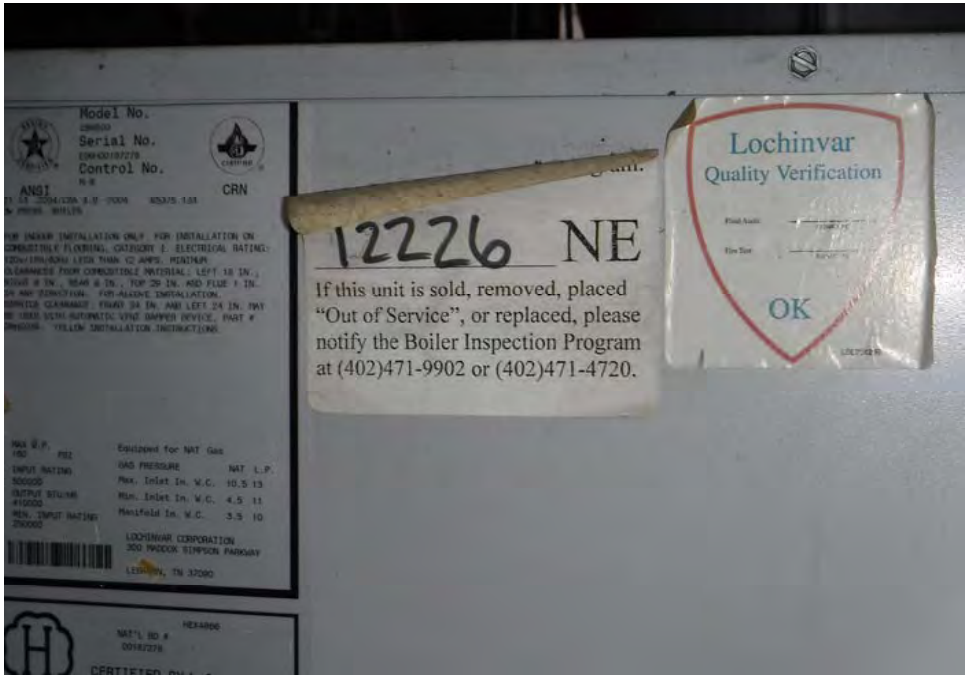

LUBE OIL TEMPERATURE IN
LUBE OIL TEMPERATURE OUT
RAW WATER TEMPERATURE
JACKET WATER TEMPERATURE - IN
JACKET WATER TEMPERATURE OUT
TURBO OIL PRESS. IN - OUT
INTERCOOLER WATER PRESS. IN - OUT
STARTING AIR PRESSURE


SCAVENGING AIR PRESSURE
GAS PRESSURE LINE - MANIFOLD
pyrometer
alnor
LUBE OIL PRESSURE IN - OUT
JACKET WTR. PRESS. IN - OUT
LUBE OIL TEMPERATURE IN
LUBE OIL TEMPERATURE OUT

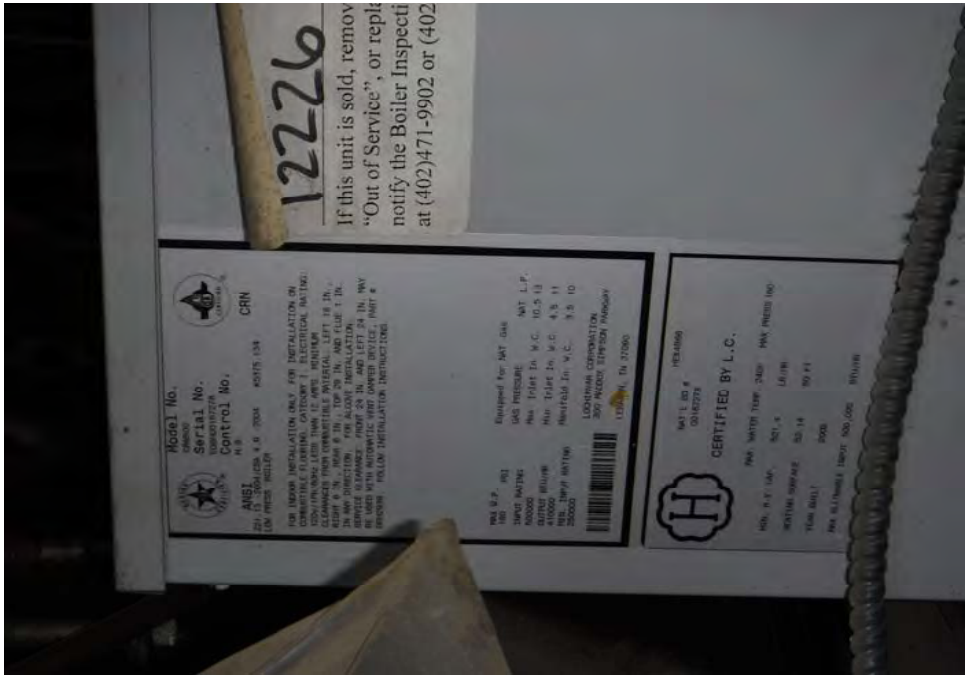

TURBO OIL PRESS. IN - OUT
INTERCOOLER WATER PRESS. IN - OUT
STARTING AIR PRESSURE
ALARM SWITCH





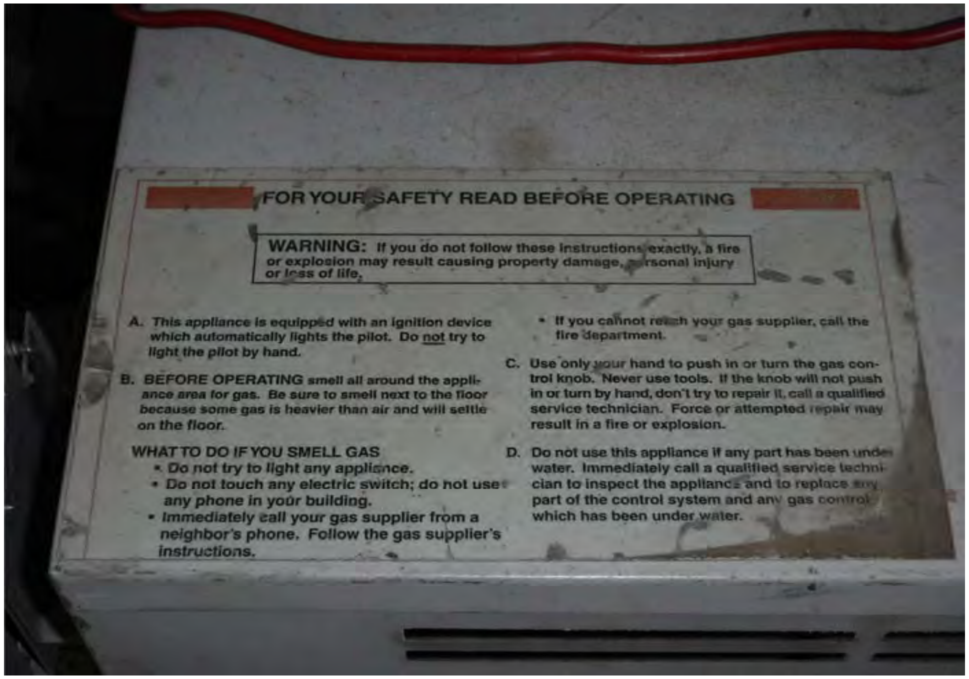

Model No.
Serial No.
Control No.
ANSI
CRN
12226 NE
If this unit is sold, removed, placed "Out of Service", or replaced, please notify the Boiler Inspection Program at (402)471-9902 or (402)471-4720.
Lochinvar
Quality Verification
OK
LOCHINVAR CORPORATION
300 MODOCK SIMPSON PARKWAY


DAMARC
Quality Inspection Services LLC
Accredited Authorized Inspection Agency
Boiler/UPV Certificate Inspection
Made on 27 NOV 01
By Inspector MARK BYER
www.Damarcquality.com
40864 NE


12226
Model No.
Serial No.
Control No.
ANSI
CRN
CERTIFIED BY L.C.


Lochinvar
UT ELECTRONIC CONTROLS
OK


OPERATING INSTRUCTIONS
2. Set the thermostat to lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot.
light the pilot by hand.
GAS CONTROL KNOB SHOWN IN THE "OFF" POSITION
Turn gas control knob counterclockwise
10. If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.
TO TURN OFF GAS TO APPLIANCE
1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Turn gas control knob clockwise to "OFF."


FOR YOUR SAFETY READ BEFORE OPERATING
WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.
A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
WHAT TO DO IF YOU SMELL GAS
• Do not try to light any appliance.
• Do not touch any electric switch; do not use any phone in your building.
• Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
• If you cannot reach your gas supplier, call the fire department.
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.


Lochinvar


JACKET WATER PRESS. TO & FROM ENGINE
STARTING AIR PRESSURE
SCAVENGING AIR PRESSURE
LUBE OIL PRESSURE DISCHARGE-HEADER
JACKET WATER TEMPERATURE-IN
FUEL OIL PRESSURE TO & FROM FILTER
FUEL GAS PRESSURE LINE-HEADER
LUBE OIL TEMPERATURE-IN
pyrometer


JACKET WATER TEMPERATURE-OUT
elnor
ALARM SWITCH
CRANKCASE VACUUM


JACKET WATER TEMPERATURE-IN
FUEL OIL PRESSURE TO & FROM FILTER
FUEL GAS PRESSURE LINE-HEADER
LUBE OIL TEMPERATURE-IN
JACKET WATER TEMPERATURE-OUT
pyrometer
elnor
LUBE OIL TEMPERATURE-OUT

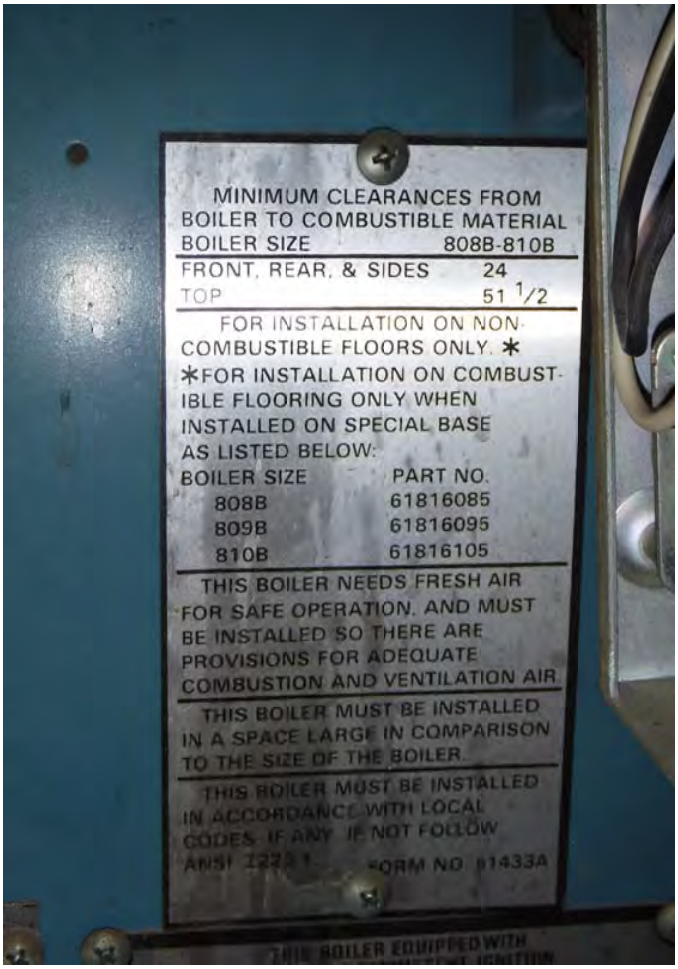

MIRATECH
MIRAMONITOR


120516005


ALARM SWITCH
CRANKCASE VACUUM
JACKET WATER HIGH TEMPERATURE
JACKET WATER LOW PRESSURE
LUBE OIL HIGH TEMPERATURE
LUBE OIL LOW PRESSURE
FUEL OIL LEVEL HI-LO
GAS LOW PRESSURE
FUEL OIL LOW PRESSURE
VACUUM PUMP #2
B&A PUMP
INTERCOOLER PUMP
LUBE OIL FILTER PUMP
on to start
on to start


MIRATECH
MM2-1098
MIRATECH
120516005


MINIMUM CLEARANCES FROM BOILER TO COMBUSTIBLE MATERIAL
BOILER SIZE 808B-810B
FRONT, REAR, & SIDES 24
TOP 51 1/2
FOR INSTALLATION ON NON-COMBUSTIBLE FLOORS ONLY. *
*FOR INSTALLATION ON COMBUSTIBLE FLOORING ONLY WHEN INSTALLED ON SPECIAL BASE AS LISTED BELOW:
BOILER SIZE PART NO.
808B 61816085
809B 61816095
810B 61816105
THIS BOILER NEEDS FRESH AIR FOR SAFE OPERATION, AND MUST BE INSTALLED SO THERE ARE PROVISIONS FOR ADEQUATE COMBUSTION AND VENTILATION AIR.
THIS BOILER MUST BE INSTALLED IN A SPACE LARGE IN COMPARISON TO THE SIZE OF THE BOILER.


MINIMUM CLEARANCES FROM BOILER TO COMBUSTIBLE MATERIAL
BOILER SIZE 808B-810B
FRONT, REAR, & SIDES 24
TOP 51 1/2
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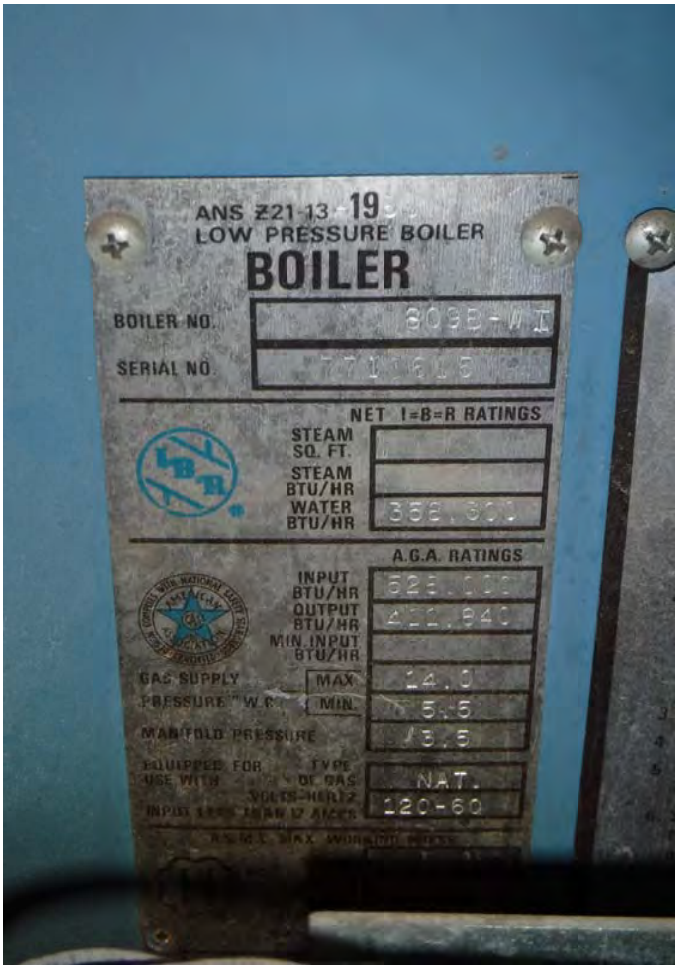
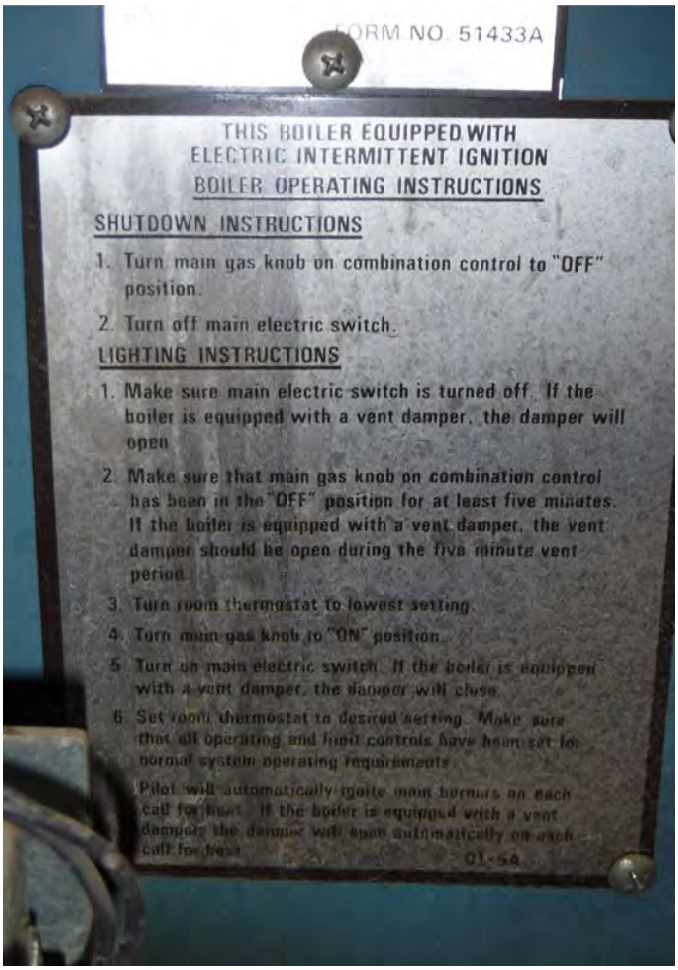
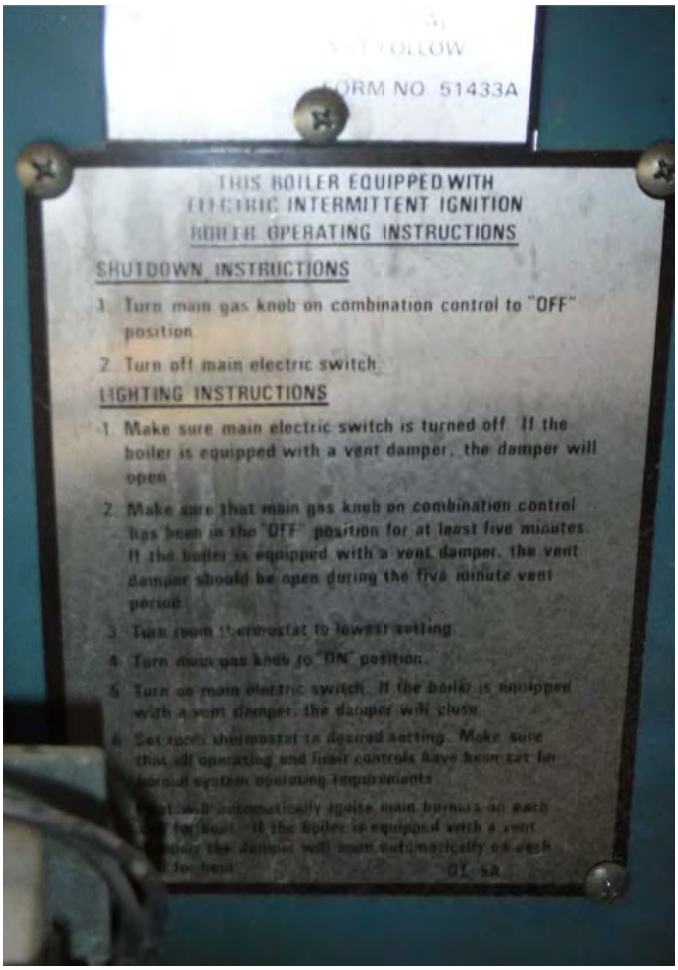
BOILER SIZE PART NO.
808B 61816085
809B 61816095
810B 61816105
THIS BOILER NEEDS FRESH AIR FOR SAFE OPERATION, AND MUST BE INSTALLED SO THERE ARE PROVISIONS FOR ADEQUATE COMBUSTION AND VENTILATION AIR.
THIS BOILER MUST BE INSTALLED IN A SPACE LARGE IN COMPARISON TO THE SIZE OF THE BOILER.
THIS BOILER MUST BE INSTALLED IN ACCORDANCE WITH LOCAL CODES. IF ANY, IF NOT FOLLOW ANSI Z223.1
FORM NO. 81433A
THIS BOILER EQUIPPED WITH


ANS Z21.13 - 19
LOW PRESSURE BOILER
BOILER
BOILER NO. 808B-WI
SERIAL NO.
NET I=B=R RATINGS
STEAM SQ. FT.
STEAM BTU/HR
WATER BTU/HR
A.G.A. RATINGS
INPUT BTU/HR
OUTPUT BTU/HR
MIN. INPUT BTU/HR
GAS SUPPLY PRESSURE W.C. MAX. 14.0
MIN. 5.5
MANIFOLD PRESSURE 13.5
EQUIPPED FOR USE WITH TYPE OF GAS NAT.
VOLTS-HERTZ 120-60


FORM NO. 51433A
THIS BOILER EQUIPPED WITH
ELECTRIC INTERMITTENT IGNITION
BOILER OPERATING INSTRUCTIONS
SHUTDOWN INSTRUCTIONS
1. Turn main gas knob on combination control to "OFF" position.
2. Turn off main electric switch.
LIGHTING INSTRUCTIONS
1. Make sure main electric switch is turned off. If the boiler is equipped with a vent damper, the damper will open.
2. Make sure that main gas knob on combination control has been in the "OFF" position for at least five minutes. If the boiler is equipped with a vent damper, the vent damper should be open during the five minute vent period.
3. Turn room thermostat to lowest setting.
4. Turn main gas knob to "ON" position.
5. Turn on main electric switch. If the boiler is equipped with a vent damper, the damper will close.
6. Set room thermostat to desired setting. Make sure that all operating and limit controls have been set for normal system operating requirements.
Pilot will automatically ignite main burners on each call for heat. If the boiler is equipped with a vent damper, the damper will open automatically on each call for heat.
01-58


FORM NO. 51433A
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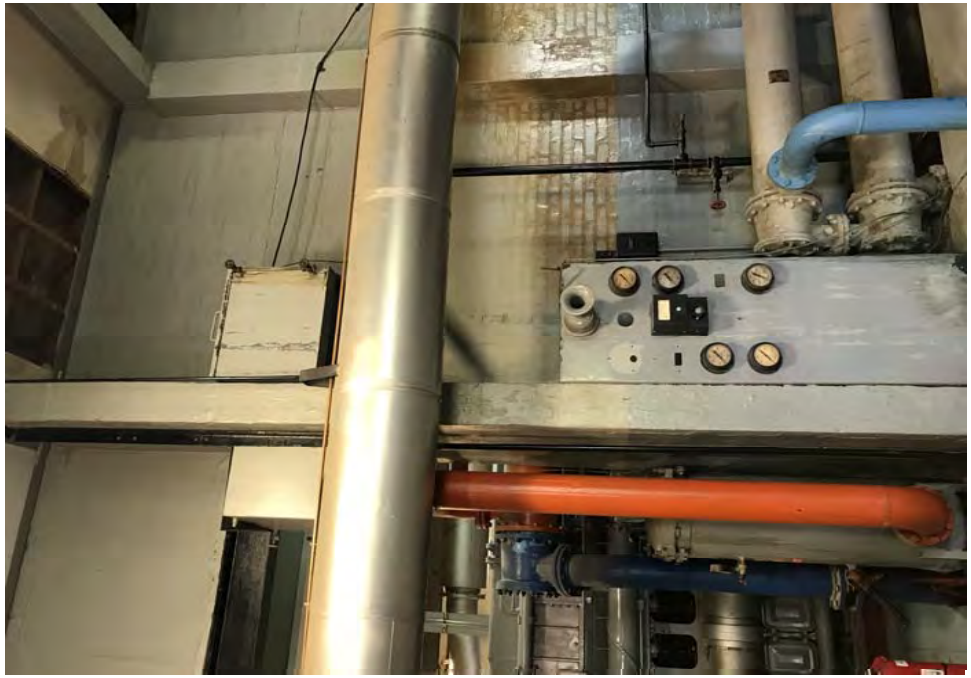
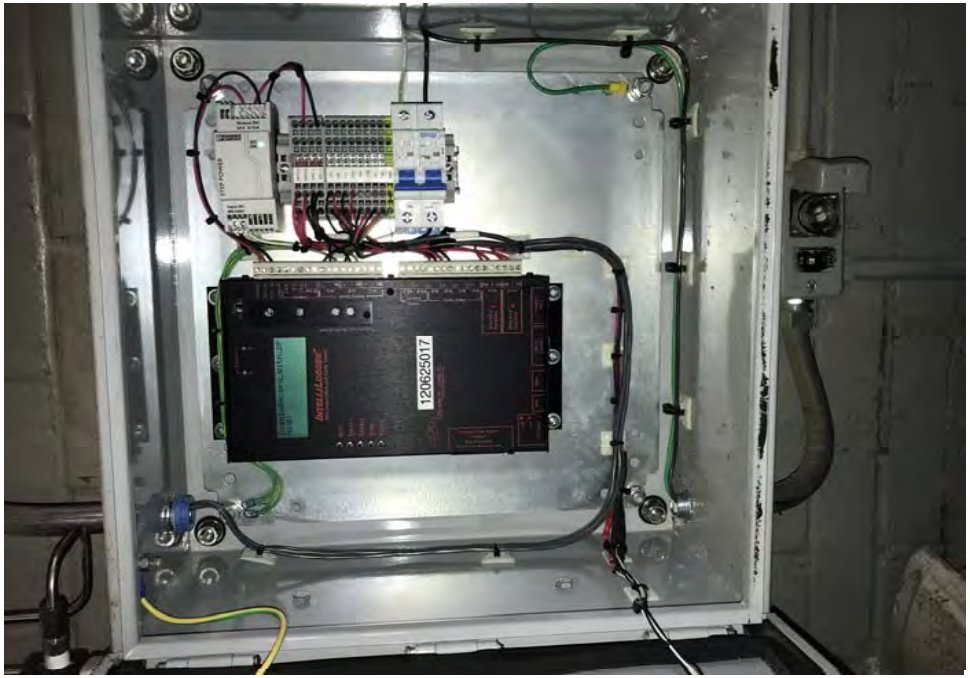
6. Set room thermostat to desired setting. Make sure that all operating and limit controls have been set for normal system operating requirements.
01-58


MIN. INPUT BTU/HR
MAX
MIN
14.0
5.5
13.5
GAS SUPPLY PRESSURE "W.C.
MANIFOLD PRESSURE
TYPE OF GAS
NAT.
EQUIPPED FOR USE WITH
120-60
VOLTS-HERTZ AMPS
INPUT LESS THAN 12
A.S.M.E. MAX. WORKING PRESS.
STEAM
WATER
V50
423

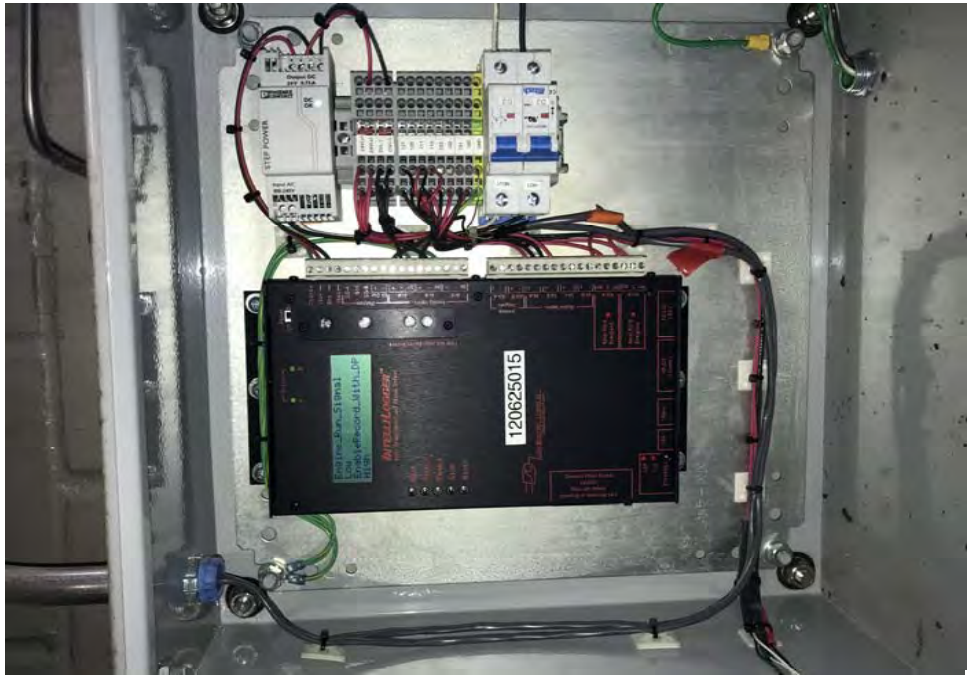

FUEL OIL PRESSURE
BEFORE — AFTER
STARTING AIR
PRESSURE
GAS PRESSURE
LINE — MANIFOLD




miratech
MIRAMONITOR


120625017


miratech
MIRAMONITOR
miratech
MIRAMONITOR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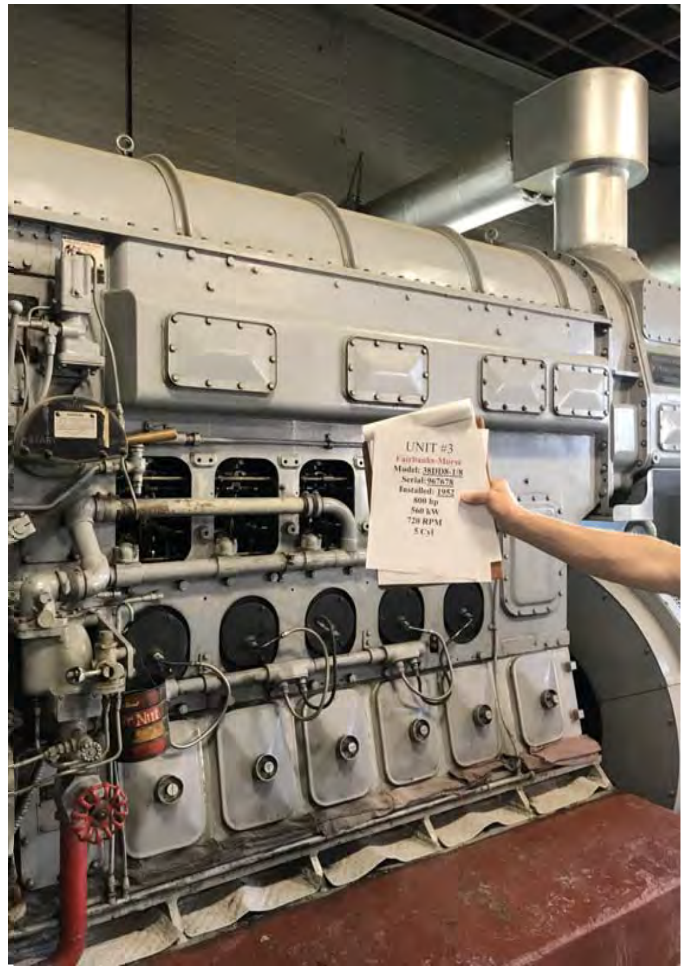
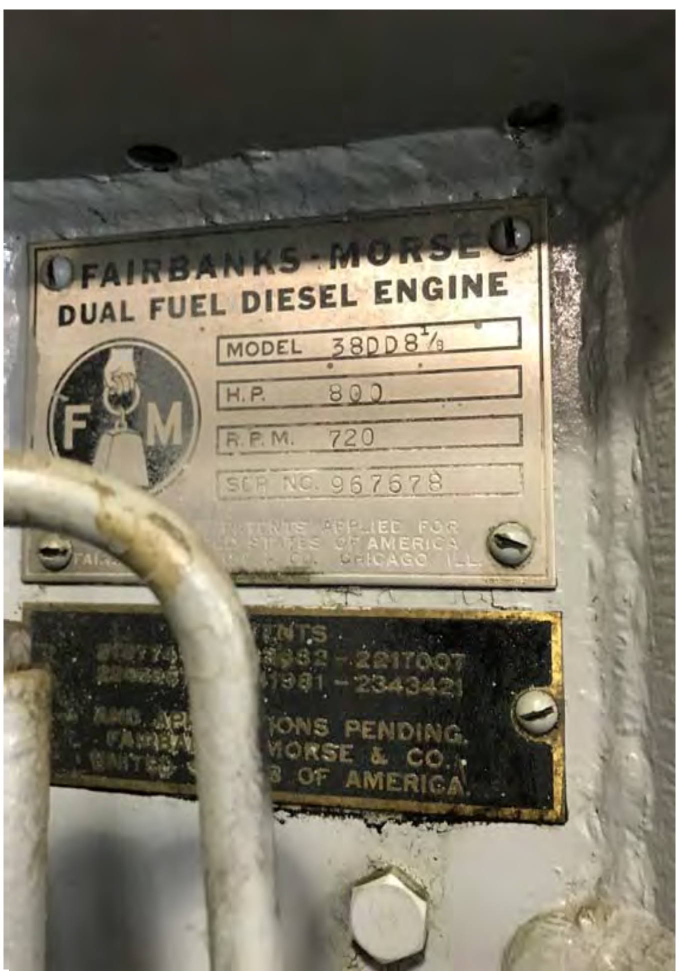
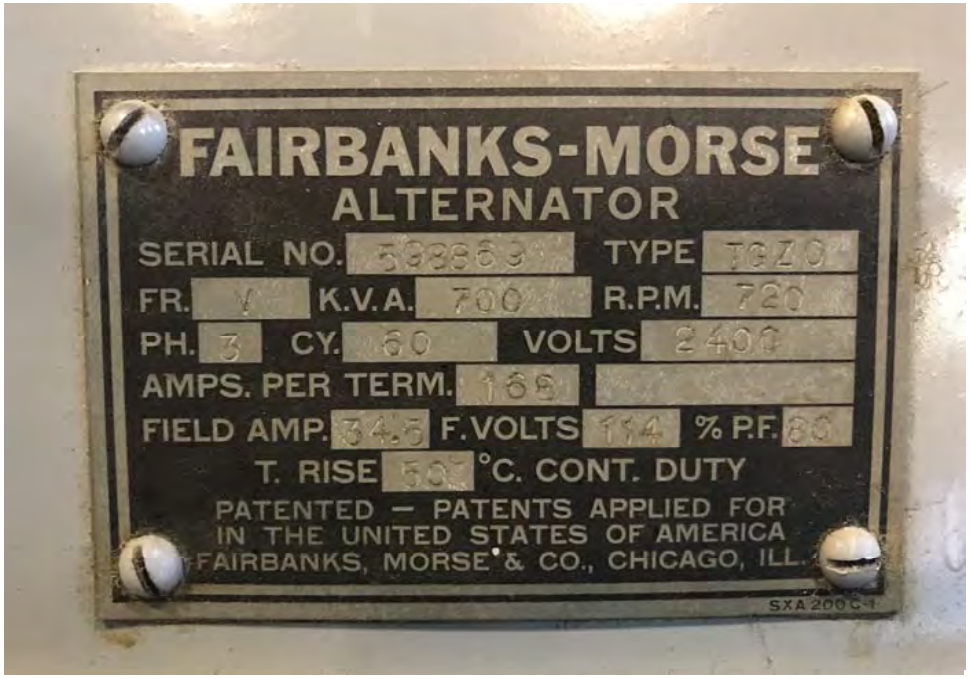

UNIT #3
Fairbanks-Morse
Model: 38DD8-1/8
Serial: 967678
Installed: 1952
800 hp
560 kW
720 RPM
5 Cyl

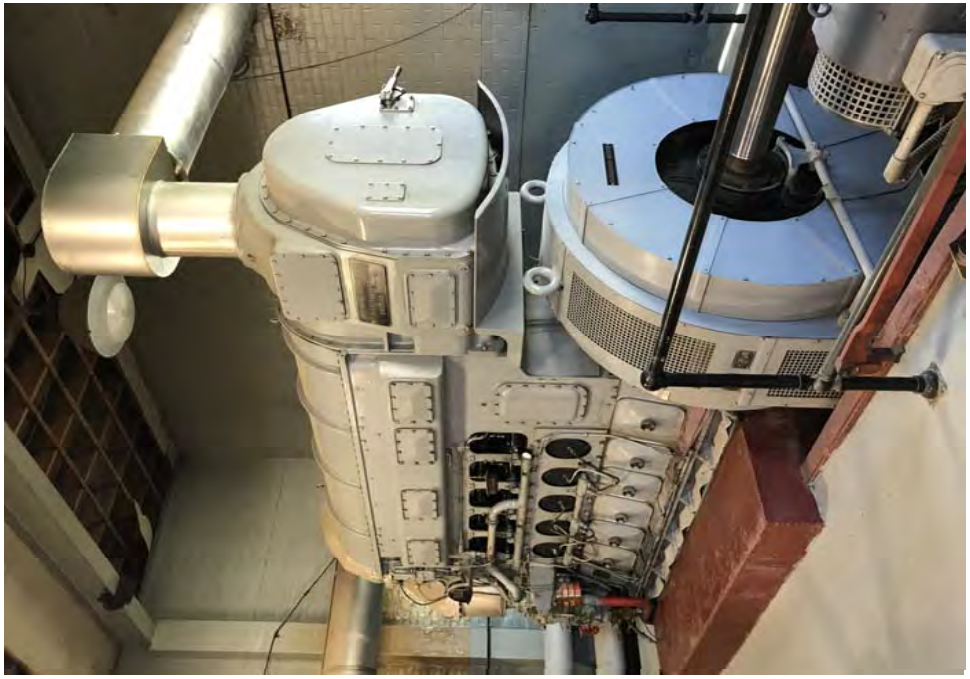

FAIRBANKS-MORSE
DUAL FUEL DIESEL ENGINE
MODEL 38DD8⅛
H.P. 800
R.P.M. 720
SER. NO. 967678
F M
MORSE & CO.
OF AMERICA

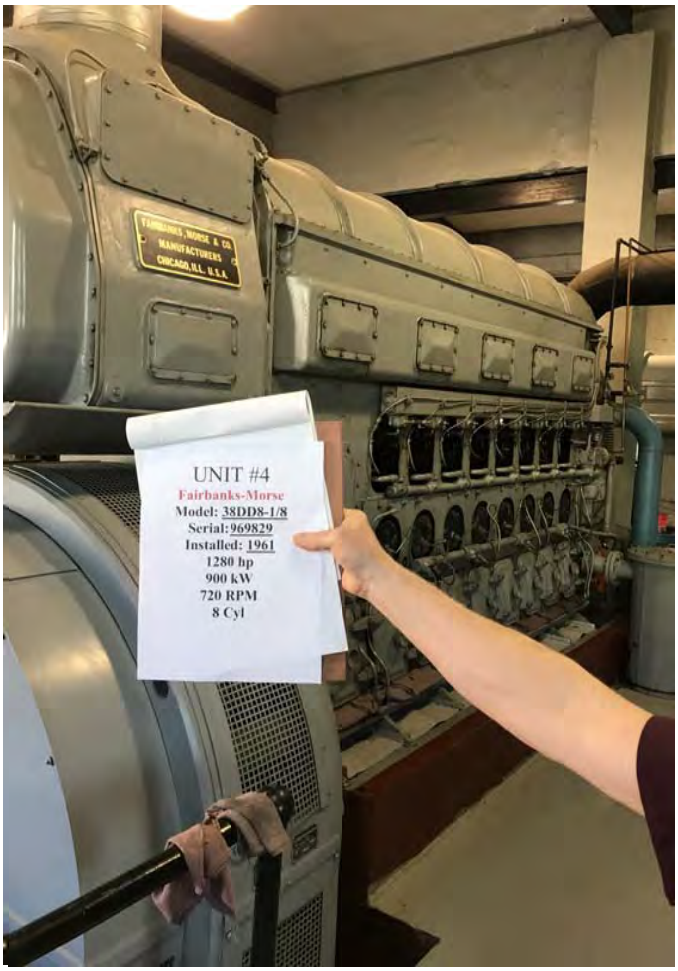

FAIRBANKS-MORSE
DUAL FUEL DIESEL ENGINE
MODEL 38DD8⅛
H.P. 800
R.P.M. 720
SER. NO. 967678
F M
APPLIED FOR
STATES OF AMERICA
CHICAGO ILL.
PATENTS
PENDING.
MORSE & CO.
STATES OF AMERICA

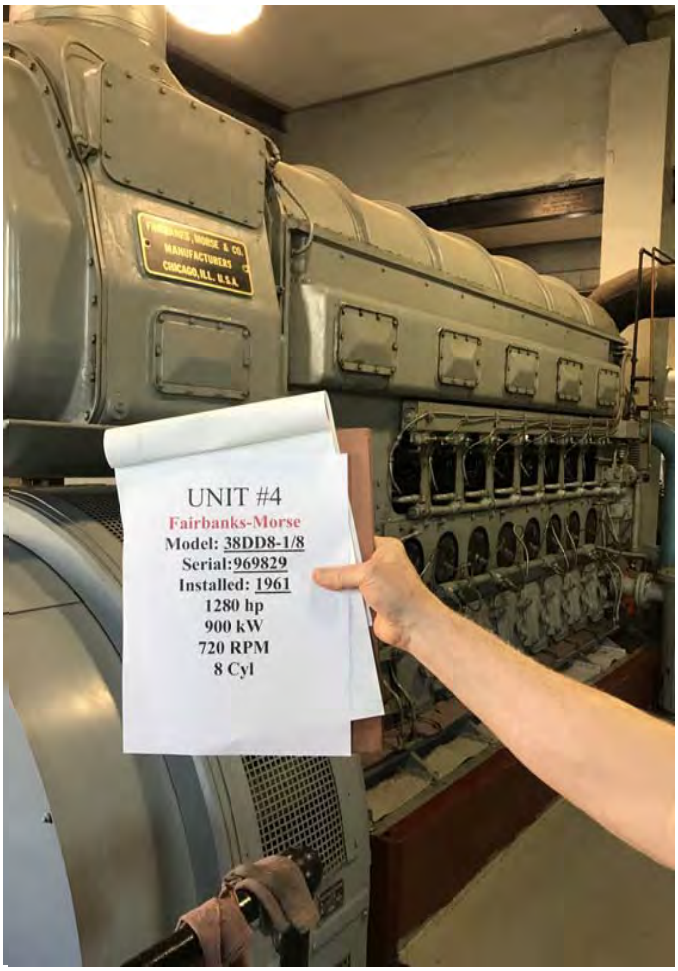

FAIRBANKS-MORSE
ALTERNATOR
SERIAL NO. 588869
TYPE TGZO
FR. Y
K.V.A. 700
R.P.M. 720
PH. 3
CY. 60
VOLTS 2400
AMPS. PER TERM. 168
FIELD AMP. 34.5
F.VOLTS 114
% P.F. 80
T. RISE 50°C. CONT. DUTY
PATENTED — PATENTS APPLIED FOR
IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.
SXA 200C-1


FAIRBANKS-MORSE
DIESEL
GENERATING SET
RATED CAPACITY K.W.
AT FT. ELEVATION
FAIRBANKS-MORSE
ALTERNATOR
SERIAL NO. 588869
TYPE TGZO
FR. Y
K.V.A. 700
R.P.M. 720
PH. 3
CY. 60
VOLTS 2400
AMPS. PER TERM. 168
FIELD AMP. 34.5
F.VOLTS 114
% P.F. 80
T. RISE 50°C. CONT. DUTY
PATENTED — PATENTS APPLIED FOR
IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.


FAIRBANKS-MORSE
DIESEL
GENERATING SET
F M
RATED CAPACITY 560 K.W.
AT FT. ELEVATION
MADE IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.




UNIT #4
Fairbanks-Morse
Model: 38DD8-1/8
Serial:969829
Installed: 1961
1280 hp
900 kW
720 RPM
8 Cyl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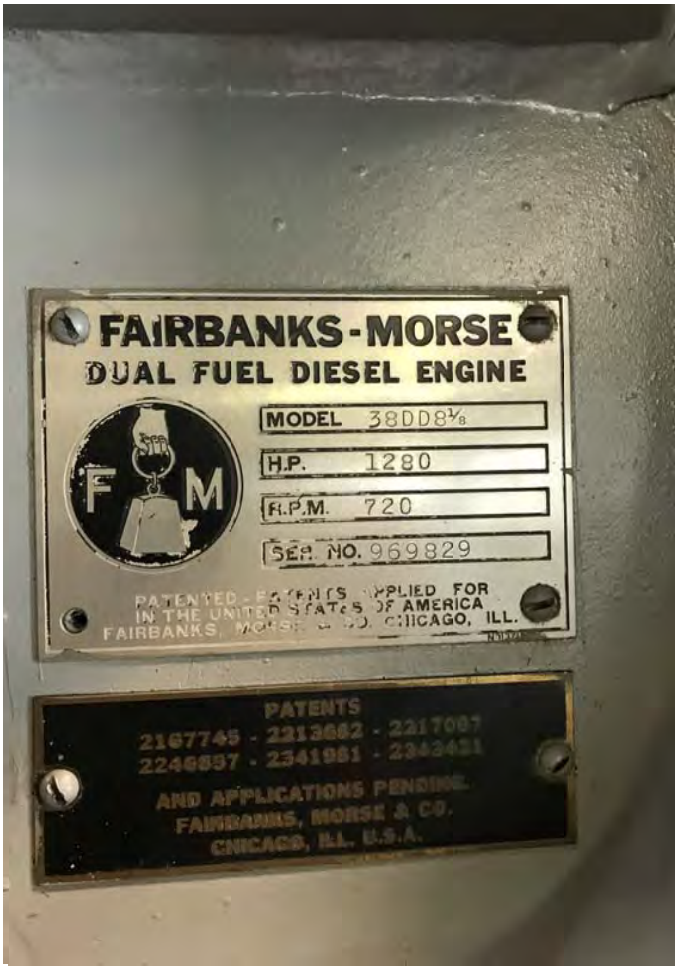
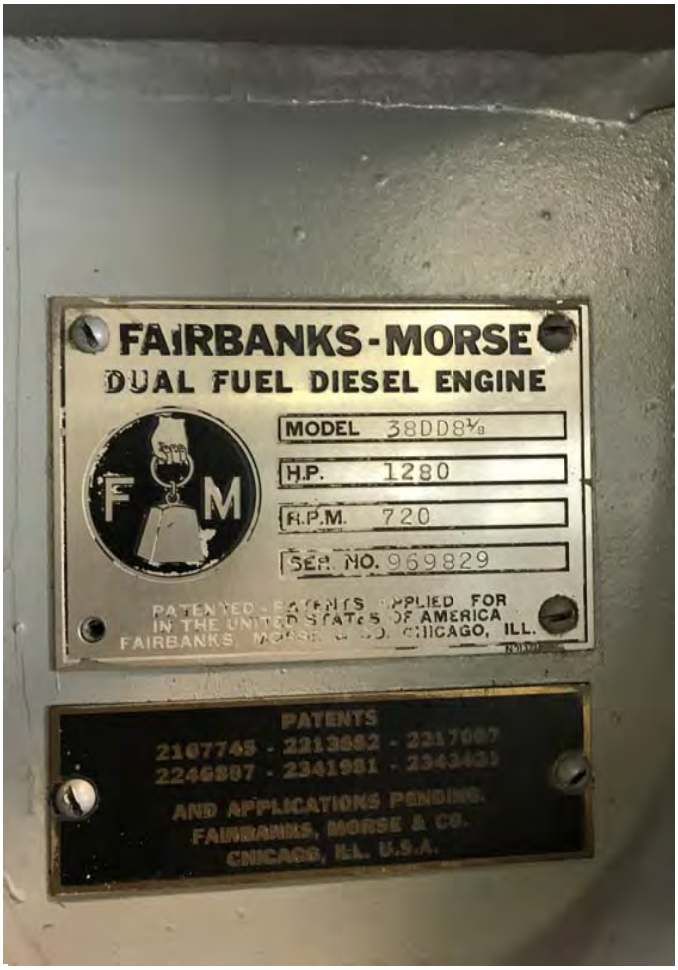
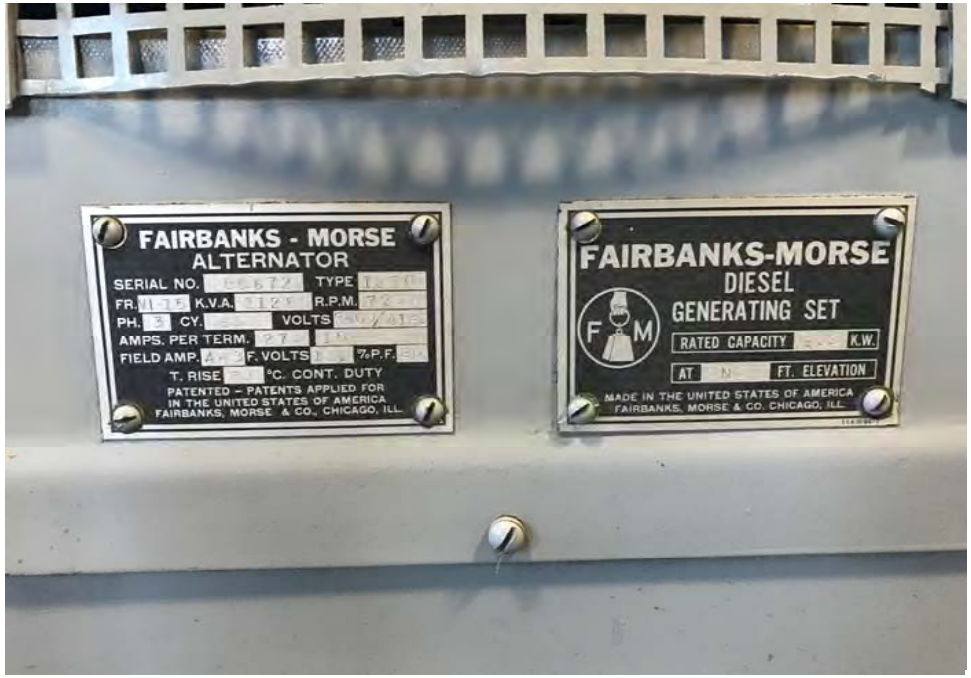
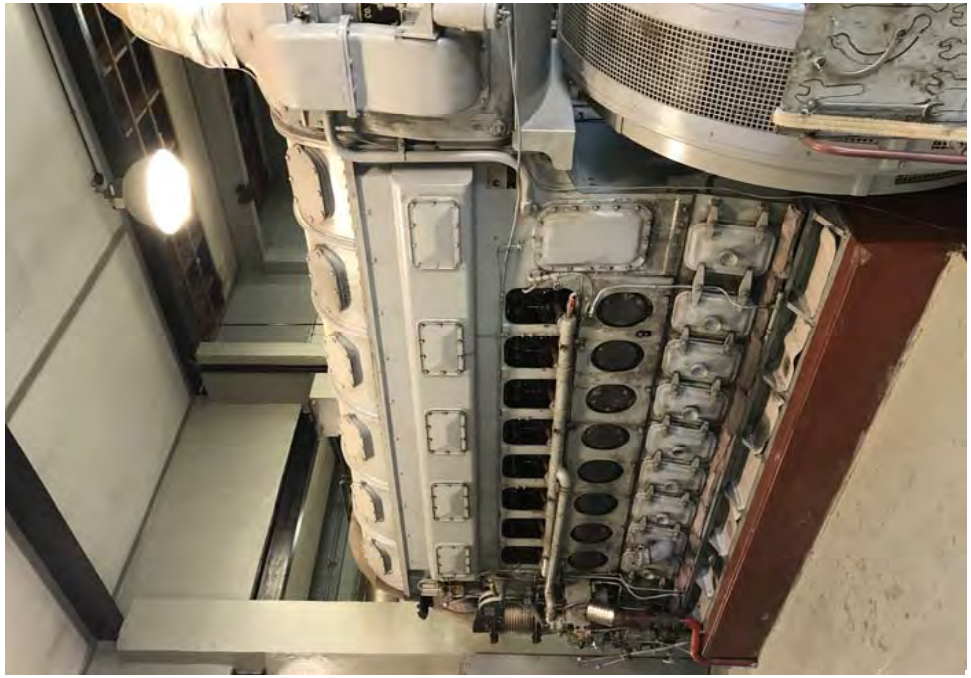
Fairbanks-Morse
Model: 38DD8-1/8
Serial:969829
Installed: 1961
1280 hp
900 kW
720 RPM
8 Cyl


FAIRBANKS-MORSE
DUAL FUEL DIESEL ENGINE
MODEL 38DD8 1/8
H.P. 1280
R.P.M. 720
SER. NO. 969829
PATENTED - PATENTS APPLIED FOR
IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO. CHICAGO, ILL.
PATENTS
2167745 - 2213682 - 2217087
2246897 - 2341981 - 2343431
AND APPLICATIONS PENDING.
FAIRBANKS, MORSE & CO.
CHICAGO, ILL. U.S.A.


FAIRBANKS-MORSE
DUAL FUEL DIESEL ENGINE
MODEL 38DD8 1/8
H.P. 1280
R.P.M. 720
SER. NO. 969829
PATENTED - PATENTS APPLIED FOR
IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO. CHICAGO, ILL.
PATENTS
2167745 - 2213682 - 2217087
2246897 - 2341981 - 2343431
AND APPLICATIONS PENDING.
FAIRBANKS, MORSE & CO.
CHICAGO, ILL. U.S.A.


FAIRBANKS - MORSE
ALTERNATOR
SERIAL NO.
TYPE
FR.
K.V.A.
R.P.M.
PH.
CY.
VOLTS
AMPS. PER TERM.
FIELD AMP.
F. VOLTS
%P.F.
T. RISE
°C. CONT. DUTY
PATENTED – PATENTS APPLIED FOR
IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.
FAIRBANKS-MORSE
DIESEL
GENERATING SET
RATED CAPACITY
K.W.
AT
FT. ELEVATION
MADE IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO. CHICAGO, ILL.


FAIRBANKS-MORSE
DIESEL
GENERATING SET
RATED CAPACITY
K.W.
AT
FT. ELEVATION
MADE IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO. CHICAGO, ILL.




FAIRBANKS - MORSE
ALTERNATOR
SERIAL NO. B5672
TYPE T620
FR. VI-15 K.V.A. 1125
R.P.M. 720
PH. 3 CY. 60
VOLTS 2400/4160
AMPS. PER TERM. 270
FIELD AMP. 44.3 F. VOLTS 101
%P.F. 80
T. RISE 50 °C. CONT. DUTY
PATENTED – PATENTS APPLIED FOR
IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.


FAIRBANKS-MORSE
DIESEL
GENERATING SET
F M
RATED CAPACITY 560 K.W.
AT NO FT. ELEVATION
MADE IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.


FAIRBANKS-MORSE
DIESEL
GENERATING SET
F M
RATED CAPACITY 560 K.W.
AT NO FT. ELEVATION
MADE IN THE UNITED STATES OF AMERICA
FAIRBANKS, MORSE & CO., CHICAGO, ILL.

Webber, Robert

From: Webber, Robert
Sent: Friday, August 24, 2018 8:03 AM
To: Dave Peterson
Cc: City of Pender - Light Plant (villageofpender@abbnebraska.com)
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit
Attachments: PenderMPP Rvsdpd Permit 2018-08-24.docx

Mr. Peterson,

Attached is a "revised pre-draft" permit for the Pender Municipal Power Plant with changes to address comments, feedback, and corrections received on the pre-draft, as well as information obtained during EPA's July 31, 2018, on-site visit. The revised pre-draft permit is intended for the Village of Pender's use only and has not been released to the public. Please don't release the revised pre-draft permit outside of the Village of Pender at this time. The intent is to solicit your comments and feedback, and to ensure we have all our facts straight before finalizing a draft permit and proceeding to public notice. EPA is planning to issue a public notice next week. Your organization will be mailed a copy of the public notice and provided a period of at least 30 days from the date of the public notice to submit formal comments.

Please review this revised pre-draft permit and send me any comments, feedback and corrections you may have as soon possible and no later than noon on Monday, August 27, 2018. Please call me if you have any questions.

Very Respectfully,
Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 | 11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

---

From: Webber, Robert
Sent: Tuesday, July 03, 2018 4:51 PM
To: 'Dave Peterson' <dpeterson@jeo.com>
Cc: City of Pender - Light Plant (villageofpender@abbnebraska.com) <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Thanks for confirming Mr. Peterson.

Very Respectfully,
Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 | 11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

---

From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Tuesday, July 03, 2018 4:45 PM
To: Webber, Robert <Webber.Robert@epa.gov>
Cc: City of Pender - Light Plant (villageofpender@abbnebraska.com) <villageofpender@abbnebraska.com>
Subject: Re: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Yes

Sent from my iPhone

On Jul 3, 2018, at 4:37 PM, Webber, Robert <Webber.Robert@epa.gov> wrote:

> Thanks again for a quick response Mr. Peterson. I do want to confirm that your acceptance of the alternative method includes the conservative emission factor.
>
> Very Respectfully,

Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 | 11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov <image001.jpg>

From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Tuesday, July 03, 2018 4:19 PM
To: Webber, Robert <Webber.Robert@epa.gov>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Thanks Mr. Webber, I have confirmed your data calculations, we are acceptable with this alternative method of calculation.
Please call or reply with questions.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
JEO CONSULTING GROUP INC
803 W. Norfolk Avenue | Norfolk, Nebraska 68701
o: 402.371.6416 | m: 402.750.4820 | f: 402.371.5109
dpeterson@jeo.com
www.jeo.com

From: Webber, Robert [mailto:Webber.Robert@epa.gov]
Sent: Tuesday, July 3, 2018 3:26 PM
To: Dave Peterson <dpeterson@jeo.com>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Thanks for the quick response Mr. Peterson. Using the more conservative emission factor based on performance testing of a similar engine-generator operating on diesel fuel at a Minnesota municipal power plant (13.2 g/bhp-hr * lb/453.6 g = 0.0291 lbs/hp-hr), a proposed alternative method to determine NOx emissions may use the following equation:

NOx Emissions (lb/month) = [2,160 hp (EU-1-EG hours) + 2,880 hp (EU-2-EG hours) + 800 hp (EU-3-EG hours) + 1,280 hp (EU-4-EG hours)] * 0.0291 lbs/hp-hr

Example if all four Pender Engines were to run for same maximum number of hours per year:

NOx Emissions = [2,160 hp + 2,880 hp + 800 hp + 1,280 hp] * [? hours/year * 0.0291 lbs/hp-hr *]
95 tpy = 7,120 hp * **?** hours/year * 0.0291 lbs/hp-hr
? hours/year = 95 tpy * [2000 lbs/ 1 ton] ÷ [7,120 hp * 0.0291 lbs/hp-hr]
= 190,000 lbs/year ÷ 207.2 lbs/hr
= 917 hours/year

(Note: 2012 permit application proposed a maximum 1,200 hours/year for each engine)

Please let me know if the conservative emission factor and alternative method is acceptable to you and your client. I plan to be available until at least 6pm today if you have any questions or would like to discuss further. I hope you enjoy the Independence Day holiday tomorrow.

Very Respectfully,

Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 |
11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Tuesday, July 03, 2018 1:48 PM
To: Webber, Robert <Webber.Robert@epa.gov>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Thanks Mr. Weber, sorry I do not have test data from a familiar engine, we do have a very similar engine, but it has not been tested. The 13 is an average kwh/gal for these engines, it is a conservative estimate when fuel consumption is not known, this is from data that has been attained over the years, this has been approved in Iowa, Minnesota and Wisconsin.

We have requested the kwh/gal data from MEAN.

If you have a proposed alternate method to determine NOx emissions based on site-rated horsepower output of each engine with an emission factor in lbs/hp-hr, please provide, as this may save some time. I am familiar with this alternate.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
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803 W. Norfolk Avenue | Norfolk, Nebraska 68701
o: 402.371.6416 | m: 402.750.4820 | f: 402.371.5109
dpeterson@jeo.com
www.jeo.com

From: Webber, Robert [mailto:Webber.Robert@epa.gov]
Sent: Tuesday, July 3, 2018 10:57 AM
To: Dave Peterson <dpeterson@jeo.com>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Mr. Peterson,

I agree with taking a little time to obtain additional information on the Pender engines from the Municipal Energy Agency of Nebraska (MEAN) to ensure we have our facts straight.

If you are available today or later this week after the holiday, I would like to further discuss each of the issues raised in my 6/19 email. Based on our discussion last week it is my understanding that you have test data you planned to share from similar engines at other municipal power plants for possible consideration to replace the AP-42 emission factor in the Pender Pre-Draft permit NOx emission equation. I also understand that you have information you planned to share from a state that has similarly applied a number 13 allocation factor that you used in your proposed spreadsheet to determine estimated heat input of each engine. If you are not contemplating a way of determining NG usage (MMscf/month) for each engine without assuming maximum 5% diesel, I would like to propose using an alternative method to determine NOx emissions that uses the site-rated horsepower output of each engine, an emission factor in lbs/hp-hr, and the metered hours that each engine is in operation.

It is my goal to work with you to resolve these issues quickly and share a revised pre-draft permit by the end of next week.

Very Respectfully,
Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 |
11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

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From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Monday, July 02, 2018 4:04 PM
To: Webber, Robert <Webber.Robert@epa.gov>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Mr. Weber,
Thank you for your response. During operations of the generators in dual fuel mode, the standard has always been 5% diesel and 95% natural gas.

It is now my understanding that the Municipal Energy Agency of Nebraska (MEAN) may have test data or copies of the actual technical specifications for the engines, with fuel usage, as they have been involved with capacity and energy load bank testing.

I feel this is worth taking a little additional time to confirm, we are contacting MEAN tomorrow and will keep you abreast of any knowledge gained.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
JEO CONSULTING GROUP INC
803 W. Norfolk Avenue | Norfolk, Nebraska 68701
o: 402.371.6416 | m: 402.750.4820 | f: 402.371.5109
dpeterson@jeo.com
www.jeo.com

From: Webber, Robert [mailto:Webber.Robert@epa.gov]
Sent: Tuesday, June 19, 2018 2:26 PM
To: Dave Peterson <dpeterson@jeo.com>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Mr. Peterson,

Thank you for your email and today's discussion. I have reviewed your proposal and think I understand and agree with most of it.

Your previous email was helpful in pointing out that that the generators do have some testing, warmup and cool down time that no kwh energy is being generated. I understand that to allow the recorded totals to be applied and the natural gas calculated for each engine, an additional natural gas and diesel "Run" time only columns are added with percentages applied to the additional fuels.

One thing that I am concerned about is that it appears that the calculation method assumes that the engines run on 5% diesel and 95% natural gas and is not reflective of the past operations. If that is correct, wondering if there is a way to calculate the NG usage for each engine from the main meter that is reflective of past and future operations.

Hoping you might be able to provide further clarification and provide references related to the use of the number 13 as a factor to make the calculated heat data seem very reasonable and use of such a number for applications with these types of engines. It is my understanding that you may be able to provide information from states that have typically applied this constant.

As I mentioned, I am also seeking your input toward addressing the following questions that have been raised about the use of AP-42 emission factors for determining emissions in the pre-draft permit:

> *Since AP-42 is based on the average of stack tests at other facilities, why was no additional compliance margin included? Also, the units in question are older than usual (with one installed as early as 1952). Are AP- 42 emission factors a good fit for the older units? A stack test on one of the older engines could be done to verify the assumed emission factor.*

Instead of requesting that a stack test be performed on one of the older Pender engines, I would like to propose the use of a NOx emission factor based on performance testing of a similar engine-generator operating on diesel fuel at a Minnesota municipal power plant (Litchfield-MN). The performance tested Litchfield-MN engine-generator is the same site rated horsepower and make/model and as Pender Unit 2: 2,880 hp Fairbanks-Morse 38TDD8 1/8. The Litchfield-MN engine-generator was installed in 1962. The 1962 install date for the Litchfield-MN engine-generator is midrange between the 1952 install date of the oldest Pender engine (Unit 3) and the 1972 install date of the newest Pender engine (Unit 2). The performance testing of the Litchfield-MN engine-generator performed on September 22, 2009, resulted in an average NOx emission rate of 13.20 g/bhp-hr. This NOx emission rate is approximately 21% higher than the AP-42 Table 3.4-1 uncontrolled Diesel NOx EF of 0.024 lb/hp-hr *[453.6 g/lb] = 10.9 g/hp-hr. The Litchfield-MN Permit is available at https://www.pca.state.mn.us/sites/default/files/09300001-003-aqpermit.pdf.

It is my understanding that you may have access to other performance test data for engines that similar in design and operation to the older Pender engines.

I appreciate your time and efforts addressing these issues. Please call me if you have any questions or would like to discuss. As I mentioned, I plan to provide you and your client with a revised pre-draft permit for review before public notice of the draft permit.

Very Respectfully,
Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 |
11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

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From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Monday, June 18, 2018 2:01 PM
To: Webber, Robert <Webber.Robert@epa.gov>
Cc: 'City of Pender - Light Plant (villageofpender@abbnebraska.com)' <villageofpender@abbnebraska.com>
Subject: FW: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Bob, just checking to ensure the proposed monthly calculation is acceptable.
I am proposing to develop a spreadsheet to calculate the monthly emissions with only entering the gallons fuel and kwh for each generator.
Please call or reply with questions.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
JEO CONSULTING GROUP INC
803 W. Norfolk Avenue | Norfolk, Nebraska 68701

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dpeterson@jeo.com
www.jeo.com

From: Dave Peterson
Sent: Friday, May 11, 2018 1:27 PM
To: 'Webber, Robert' <Webber.Robert@epa.gov>
Cc: villageofpender@abbnebraska.com
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Bob,
A specific calculation for how the City separated the natural gas between each of the engines does not work for all the monthly data recorded. It appears some of the data was calculated using a percentage of the kwh energy generated.

With revenue grade kwh meters and the new diesel fuel meters on each of the engines, the Village would be more accurate to the known volumes of product consumed and generated.
It would be difficult to relocate the natural gas fuel piping and install natural gas meters on each of the engines, thus the Village requests that the following calculations be utilized.

Included is an excel spreadsheet file with (2) tabs,
The first tab is a proposed calculation method with fuel used for generation (engine performance based the load factor of the kwh) and non-generation (excess fuel from inventory log)
The Estimated Heat Input (MMBTU/hr) of each engine is proposed to be calculated based on the kW generation, for this application, the number 13 is used to make the calculated heat data seem very reasonable. (Between 13 and 14 is typically where this number is for applications with these types of engines). The heat input is first calculated at full load capability of the generators, then utilizing the load factor for the actual kwh and engine performance, the heat input is calculated. Understanding that the generators do have some testing, warmup and cool down time that no kwh energy is being generated, also to allow the recorded totals to be applied and the natural gas calculated for each engine, an additional natural gas and diesel “Run” time only columns are added with percentages applied to the additional fuels.

The second tab is the inventory log with the proposed calculation and monthly NOx calculation included. This would be the additional process for how the Village proposes to comply with the new Synthetic Minor Source Permit for calculating and recording.
If this calculation and recording is acceptable, some additional improvements will also be made to make this file more user friendly for the Village.

Please call or reply with any questions or comments.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
JEO CONSULTING GROUP INC
803 W. Norfolk Avenue | Norfolk, Nebraska 68701
o: 402.371.6416 | m: 402.750.4820 | f: 402.371.5109
dpeterson@jeo.com
www.jeo.com

From: Webber, Robert [mailto:Webber.Robert@epa.gov]
Sent: Monday, May 7, 2018 9:54 AM
To: Dave Peterson <dpeterson@jeo.com>

Cc: villageofpender@abbnebraska.com
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Mr. Peterson,

I am not aware of a specific calculation for use in separating the natural gas usage for each engine. Wondering how the usage for each engine has been determined for use in the Emission Inventory reports submitted to NDEQ.

Very Respectfully,

Bob Webber
Air Permitting & Compliance Branch
Air and Waste Management Division
U.S. Environmental Protection Agency, Region VII
11201 Renner Boulevard
Lenexa, KS 66219
Phone: 913-551-7251
webber.robert@epa.gov

From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Friday, April 27, 2018 7:47 AM
To: Webber, Robert <Webber.Robert@epa.gov>
Subject: FW: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Hi Bob, For Section II – Unit Specific Requirements, (2) Monitoring, Recordkeeping and Reporting Requirements, part v.

1. The power plant has one main natural gas meter and each of the engines does not have a separate meter. They do have revenue grade kwh energy meters and diesel fuel meters for each engine. I am wondering if you have a specific calculation you like to use to separate the natural gas.

2. Also, for the 1,000 MMBtu/MMscf is the heat value of diesel (should be Natural Gas) fuel as provided in the 2012 permit application

Other than these comments, we are acceptable with the permit.

Please call or reply with questions.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
JEO CONSULTING GROUP INC
803 W. Norfolk Avenue | Norfolk, Nebraska 68701
o: 402.371.6416 | m: 402.750.4820 | f: 402.371.5109
dpeterson@jeo.com
www.jeo.com

From: villageofpender@abbnebraska.com [mailto:villageofpender@abbnebraska.com]
Sent: Monday, April 9, 2018 1:26 PM
To: Dave Peterson <dpeterson@jeo.com>
Subject: Fwd: Pender Municipal Power Plant - Preliminary-Draft Air Permit

FYI

From: "Webber, Robert" <Webber.Robert@epa.gov>
To: "villageofpender" <villageofpender@abbnebraska.com>, "Tim Grant2" <Tim.Grant2@omahatribe.com>, tparker@omahatribe.com, "joseph painter" <joseph.painter@winnebagotribe.com>, "gary buttermore" <gary.buttermore@nebraska.gov>, "Sarah Piziali" <Sarah.Piziali@dnr.iowa.gov>
Cc: "Bustos, Patrick" <Bustos.Patrick@epa.gov>, "Scott, Patricia A." <Scott.PatriciaA@epa.gov>, "Peter, David" <peter.david@epa.gov>
Sent: Friday, April 6, 2018 7:01:58 AM
Subject: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Greetings,

Attached are “pre-drafts” of an Air Permit and Technical Support Document (TSD) for the Pender Municipal Power Plant. The pre-drafts are intended for your use only and have not been released to the public. Please don’t release these pre-drafts outside of your organization at this time. The intent is to solicit your comments and feedback, and to ensure we have all our facts straight before finalizing a draft permit and proceeding to public notice. Once a draft permit is finalized, your organization will be mailed a copy of the public notice and provided a period of at least 30 days from the date of the public notice to submit formal comments.

Please review these pre-drafts and send me any comments, feedback and corrections you may have as soon possible and no later than Friday, April 27, 2018. Please call me if you have any questions.

Very Respectfully,

Bob Webber
Air Permitting & Compliance Branch
Air and Waste Management Division
U.S. Environmental Protection Agency, Region VII
11201 Renner Boulevard
Lenexa, KS 66219
Phone: 913-551-7251
webber.robert@epa.gov

Webber, Robert

From: Kuhn, Karen <karen.kuhn@dnr.iowa.gov>
Sent: Friday, April 27, 2018 9:04 AM
To: Webber, Robert
Subject: Pender Municipal comments
Attachments: 20180427085029626.pdf

See attached

Note new mailing address in effect

Karen Kuhn | Senior Environmental Engineer

Iowa Department of Natural Resources
P 515.725.9560 | F 515.725.9501 |Karen.Kuhn@dnr.iowa.gov
Air Quality Bureau | 502 E. 9th St. |
Des Moines, IA 50319
www.IowaCleanAir.gov | Air Construction Permit Hotline 877.247.4692

www.iowadnr.gov

DEPARTMENT OF NATURAL RESOURCES

GOVERNOR KIM REYNOLDS
LT. GOVERNOR ADAM GREGG
DIRECTOR CHUCK GIPP

April 29, 2018

Bob Webber
Tribal NSR Coordinator
Air Permitting & Compliance Branch
Air and Waste Management Division
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard, Lenexa KS 6619

Subject: Comments on Proposed Synthetic Minor Source Permit for Pender Municipal Power Plant, Permit R7-TMNSR-FY18-001

Dear Mr. Webber:

The Iowa Department of Natural Resources (DNR) appreciates the opportunity to provide comments regarding the pre-draft Synthetic Minor Source permit for the Pender Municipal Power Plant facility located at 205 North 3rd Street, Pender, Nebraska 68047 within the exterior boundaries of the Omaha Indian Reservation.

There are several electrical generating plants in Iowa with synthetic minor PSD limits. DNR is concerned that many of the issues noted this letter regarding federal enforceability, if left unaddressed, could create inequities in how power plant are regulated within the region. The DNR requests that the comments provided do not delay the issuance of the synthetic minor source permit.

Enforceable as a Practical Matter

The DNR concurs with EPA that the draft permit establishes restrictions to limit potential emissions for all criteria pollutants below major source applicability thresholds for purposes of Title V Operating Program (Title V) and Prevention of Significant Deterioration (PSD). The DNR requests clarification regarding Section 1: General Source Information (A), where the draft permit states "This permit establishes federally enforceable nitrogen oxide (NOx) and carbon monoxide (C) emission limits…." although the draft permit itself only has a NOx limit of 95 tpy for the four existing engine-generators. Based on the technical support document, EPA believes that the NOx limit automatically limits CO too, with no need for the source to show compliance with a separate CO limit. Would the EPA also consider

the other pollutants not named (VOC, PM, SO2, etc) to have federally enforceable limits based on the NOx limitation?

The permit appears to be overly burdensome on the source to demonstrate that its minor source status and compliance with the National Ambient Air Quality Standards (NAAQS) is maintained on an ongoing basis.

The methods utilized in the draft permit to maintain the source's minor status should establish limits that are enforceable as a practical matter[1], are achievable in practice and consider the sources operations. Below are some of the specific instances where the draft permit does not appear to meet these criteria.

In Section IV: General Permit Requirements (G), EPA states that "should EPA determine that calculated emissions are approaching or exceeding an emission limit, or should EPA determine that the permittee is failing to maintain adequate recordkeeping requirements, EPA may revise, reopen or modify the permit to require daily calculations of emissions…". If EPA plans to change the recordkeeping frequency EPA should establish clear criteria in the permit for when the additional recordkeeping, such as daily monitoring of material usage and emissions will occur. Such a general requirement does not establish a clear method to determine compliance and does not include the appropriate monitoring and recordkeeping and is not enforceable as a practical matter.

In Section IV: General Permit Requirements (H), the draft permit includes the requirement that "The emission units subject to this construction permit shall not cause or contribute to a violation of any National Ambient Air Quality Standards (NAAQS) or to a violation of a PSD increment." Including this requirement in a permit incorrectly places the responsibility for ensuring that the NAAQS is being met on the facility. The Clean Air Act (CAA) places the responsibility for achieving the NAAQS on the applicable governing authority through their respective implementation plans. In cases where an approved State or Tribal Implementation Plan does not exist, this responsibility passes to the EPA. Such a general requirement does not establish a clear method for the source to determine compliance and does not include the appropriate monitoring and recordkeeping and is not enforceable as a practical matter. In addition, the Technical Support Document should explain why EPA currently believes the facility is not causing or contributing to a violation of the NAAQS. If this determination is based on modeling, the DNR believes that the emission point parameters (such as stack height, airflows, stack orientation, etc) used in the model should also be included in the permit for reference.

The DNR requests clarification on the use of AP-42 emission factors for determining emissions. Since AP-42 is based on the average of stack tests at other facilities, why was no additional compliance margin included? Also, the units in question are older than usual (with one installed as early as 1952). Are AP-42 emission factors a good fit for the older units? A stack test on one of the older engines could be done to verify the assumed emission factor.

Emission Limits

The DNR questions the need to establish limitations based on the design capacity of the engine-generators (Section II: Unit-Specific Requirements (A)(1)(i through iv.), day tank (Section II: Unit-Specific Requirements (B)(1)(i.) and (B)(2)(i)) and water heater (Section II: Unit-Specific Requirements (C)(1)(i.) and (C)(2)(i and ii)). The EPA has determined that the NOx limitation on the engine-generators will create a federally enforceable synthetic minor. As the NOx limitation depends on fuel

usage rather than hours of operation in the case of the engine-generators, it is unnecessary to specify the size of the unit in Section II – Unit-Specific Requirements in addition to the description given in Section I – Facility Description. The day tank will not have any NOx emissions, and the NOx emissions of the water heater, at a PTE of 0.11 tpy, cannot change the synthetic minor status of the plant even in a "worst-case" scenario.

Reporting Requirements

The DNR notes that Section III – Facility-Wide Requirements, Condition C (1)(v) could be potentially confusing. Is the required annual report requiring 12-month rolling sums of NOx emissions from all Engine-generators for each month of the year in the report? Similarly for Condition C(1)(vii) – should the report include the 12-month rolling sum for each month of the year in the report?

The DNR requests clarification for the purpose of the 12-month rolling sums of time for each Engine-generator in Condition C(1)(vii). If this is because the unit is intended to be operated as a "limited-use" engine, the DNR would suggest a further requirement that the facility will need to report to EPA that the engine is no longer a "limited-use" engine once it exceeds the threshold in question.

Again, DNR appreciates the opportunity to provide comments regarding the pre-draft Synthetic Minor Source permit for the Pender Municipal Power Plant. If you have any questions regarding the comments provided, please contact Karen Kuhn at (515) 725-9560.

Sincerely,

Sarah Piziali
Construction Permit Supervisor
Air Quality Bureau
Iowa Department of Natural Resources

Webber, Robert

From: Webber, Robert
Sent: Monday, August 27, 2018 8:09 AM
To: 'Dave Peterson'
Cc: City of Pender - Light Plant (villageofpender@abbnebraska.com)
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Thanks for your quick response Mr. Peterson.

Very Respectfully,
Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 | 11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

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From: Dave Peterson [mailto:dpeterson@jeo.com]
Sent: Monday, August 27, 2018 8:00 AM
To: Webber, Robert <Webber.Robert@epa.gov>
Cc: City of Pender - Light Plant (villageofpender@abbnebraska.com) <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Thanks Bob, I have reviewed the pre-draft permit and do not have any comments.
Respectfully

DAVID R. PETERSON, PE | Senior Electrical Engineer
JEO CONSULTING GROUP INC
803 W. Norfolk Avenue | Norfolk, Nebraska 68701
o: 402.371.6416 | m: 402.750.4820 | f: 402.371.5109
dpeterson@jeo.com
www.jeo.com

From: Webber, Robert <Webber.Robert@epa.gov>
Sent: Friday, August 24, 2018 8:03 AM
To: Dave Peterson <dpeterson@jeo.com>
Cc: City of Pender - Light Plant (villageofpender@abbnebraska.com) <villageofpender@abbnebraska.com>
Subject: RE: Pender Municipal Power Plant - Preliminary-Draft Air Permit

Mr. Peterson,

Attached is a "revised pre-draft" permit for the Pender Municipal Power Plant with changes to address comments, feedback, and corrections received on the pre-draft, as well as information obtained during EPA's July 31, 2018, on-site visit. The revised pre-draft permit is intended for the Village of Pender's use only and has not been released to the public. Please don't release the revised pre-draft permit outside of the Village of Pender at this time. The intent is to solicit your comments and feedback, and to ensure we have all our facts straight before finalizing a draft permit and proceeding to public notice. EPA is planning to issue a public notice next week. Your organization will be mailed a copy of the public notice and provided a period of at least 30 days from the date of the public notice to submit formal comments.

Please review this revised pre-draft permit and send me any comments, feedback and corrections you may have as soon possible and no later than noon on Monday, August 27, 2018. Please call me if you have any questions.

Very Respectfully,
Bob Webber | Environmental Engineer |Air Permitting & Compliance Branch |U.S. EPA Region 7 | 11201 Renner Blvd | Lenexa, KS 66219 | (913) 551-7251| webber.robert@epa.gov

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 2 7 2018

Mr. Bruce Paeper
Utilities Superintendent
Village of Pender
P.O. Box 5
416 Main Street
Pender, Nebraska 68047

RE: EPA Region 7 Issuance of Synthetic Minor Source Permit for Pender Municipal Power Plant, Pender, Nebraska in Indian country

Dear Mr. Paeper:

The Environmental Protection Agency (EPA), Region 7 is seeking comments on a draft Synthetic Minor Source permit for your facility located at 205 North 3rd St. (NE Corner of Ivan St. & N 3rd St.) Pender, Nebraska 68047 within the exterior boundaries of the Omaha Indian Reservation.

A copy of the public notice is enclosed. Copies of the draft permit and supporting information will be available online at EPA website: https://www.epa.gov/caa-permitting/status-tribal-air-permits-region-7.

If you have any questions, please feel free to contact Bob Webber of my staff at (913) 551-7251.

Sincerely,

Leslye Werner

Leslye Werner, Acting Chief
Air Permitting and Compliance Branch
Air and Waste Management Division

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 2 7 2018

Mr. Mike Wolfe
Chairman
Omaha Tribe of Nebraska
P.O. Box 368, 100 Main Street
Macy, Nebraska 68039

RE: Clean Air Act and EPA Region 7 Issuance of Synthetic Minor Source Permit for Pender Municipal Power Plant, Pender, Nebraska in Indian country

Dear Chairman Wolfe:

The Environmental Protection Agency (EPA), Region 7 is seeking public comments on a draft Synthetic Minor Source permit for the Pender Municipal Power Plant facility located at 205 North 3rd Street (NE Corner of Ivan St. and N 3rd St.), Pender, Nebraska 68047 within the exterior boundaries of the Omaha Indian Reservation.

A copy of the public notice is enclosed. Copies of the draft permit and supporting information will be available online at EPA website: https://www.epa.gov/caa-permitting/status-tribal-air-permits-region-7.

If you have any questions, please feel free to contact Bob Webber of my staff at (913) 551-7251.

Sincerely,

Leslye Werner

Leslye Werner, Acting Chief
Air Permitting and Compliance Branch
Air and Waste Management Division

Enclosure

cc: Patrick Bustos, EPA Region 7 Office of Tribal and International Coordination

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 2 7 2018

Mr. Frank White
Chairman
Winnebago Tribe of Nebraska
P. O. Box 687, 100 Bluff Street
Winnebago, Nebraska 68071

RE: Clean Air Act and EPA Region 7 Issuance of Synthetic Minor Source Permit for Pender Municipal Power Plant, Pender, Nebraska in Indian country

Dear Chairman White:

The Environmental Protection Agency (EPA), Region 7 is seeking public comments on a draft Synthetic Minor Source permit for the Pender Municipal Power Plant facility located at 205 North 3rd Street (NE Corner of Ivan St. and N 3rd St.), Pender, Nebraska 68047 within the exterior boundaries of the Omaha Indian Reservation.

A copy of the public notice is enclosed. Copies of the draft permit and supporting information will be available online at EPA website: https://www.epa.gov/caa-permitting/status-tribal-air-permits-region-7.

If you have any questions, please feel free to contact Bob Webber of my staff at (913) 551-7251.

Sincerely,

Leslye E Werner

Leslye Werner, Acting Chief
Air Permitting and Compliance Branch
Air and Waste Management Division

Enclosure

cc: Patrick Bustos, EPA Region 7 Office of Tribal and International Coordination

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 2 7 2018

Ms. Sarah Piziali
Construction Permit Supervisor
Air Quality Bureau
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, Iowa 50319

RE: Clean Air Act and EPA Region 7 Issuance of Synthetic Minor Source Permit for Pender Municipal Power Plant, Pender, Nebraska in Indian country

Dear Ms. Piziali:

The Environmental Protection Agency (EPA), Region 7 is seeking comments on a draft Synthetic Minor Source permit for the Pender Municipal Power Plant facility located at 205 North 3rd Street (NE Corner of Ivan St. and N 3rd St.), Pender, Nebraska 68047 within the exterior boundaries of the Omaha Indian Reservation.

A copy of the public notice is enclosed. Copies of the draft permit and supporting information will be available online at EPA website: https://www.epa.gov/caa-permitting/status-tribal-air-permits-region-7.

EPA appreciates DNR's earlier review of preliminary-drafts and the comments provided in your letter dated April 29, 2018.

If you have any questions, please feel free to contact Bob Webber of my staff at (913) 551-7251.

Sincerely,

Leslye Werner

Leslye Werner, Acting Chief
Air Permitting and Compliance Branch
Air and Waste Management Division

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 2 7 2018

Mr. Gary Buttermore
Air Permitting Section Supervisor
Air Quality Division
Nebraska Department of Environmental Quality
P.O. Box 98922, 1200 "N" Street, Suite 400
Lincoln, Nebraska 68509-8922

RE: Clean Air Act and EPA Region 7 Issuance of Synthetic Minor Source Permit for Pender Municipal Power Plant, Pender, Nebraska in Indian country

Dear Mr. Buttermore:

The Environmental Protection Agency (EPA), Region 7 is seeking comments on a draft Synthetic Minor Source permit for the Pender Municipal Power Plant facility located at 205 North 3rd Street (NE Corner of Ivan St. and N 3rd St.), Pender, Nebraska 68047 within the exterior boundaries of the Omaha Indian Reservation.

A copy of the public notice is enclosed. Copies of the draft permit and supporting information will be available online at EPA website: https://www.epa.gov/caa-permitting/status-tribal-air-permits-region-7.

If you have any questions, please feel free to contact Bob Webber of my staff at (913) 551-7251.

Sincerely,

Leslye E Werner

Leslye Werner, Acting Chief
Air Permitting and Compliance Branch
Air and Waste Management Division

Enclosure