



Entergy Nuclear Operations, Inc.
Palisades Nuclear Plant
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PNP 2015-027

April 27, 2015

Facility Operating License
Appendix B, Section 5.4.1

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: 2014 Annual Non-radiological Environmental Operating Report

Palisades Nuclear Plant
Docket 50-255
License No. DPR-20

Dear Sir or Madam:

Entergy Nuclear Operations, Inc (ENO) is providing the Palisades Nuclear Plant (PNP) Annual Non-radiological Environmental Operating Report for 2014. This report was prepared in accordance with the PNP Renewed Facility Operating License, Appendix B, section 5.4.1. The attached report describes the implementation of the Environmental Protection Plan from January 1, 2014, through December 31, 2014.

This letter contains no new commitments and no revisions to existing commitments.

Sincerely,

A handwritten signature in black ink, appearing to read "JAHJ".

JAH/bed

Attachment: 1. 2014 Annual Non-radiological Environmental Operating Report
2. Herbicide and Pesticide Treatments

cc: Administrator, Region III, USNRC
Project Manager, Palisades, USNRC
Resident Inspector, Palisades, USNRC

ATTACHMENT 1
2014 ANNUAL NON-RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

1.0 BACKGROUND

Appendix B of the Renewed Facility Operating License for the Palisades Nuclear Plant (PNP) requires the submittal of an annual environmental operating report to the Nuclear Regulatory Commission (NRC), describing the implementation of the Environmental Protection Plan (EPP) during the previous year. The reporting period is January 1, 2014, through December 31, 2014.

The PNP operated for 7,310 hours and produced a net total of 5,830,363 MWh during 2014. This represents 82.7% of the net demonstrated capacity of the design electric rating of 805 MWe.

2.0 ENVIRONMENTAL IMPACT EVALUATIONS

Eight engineering change and related documents were evaluated per Entergy Nuclear Operations, Inc. (ENO) procedure, EN-EV-115, "Environmental Reviews and Evaluations," during 2014.

Engineering Change (EC), EC-53984 for installation of a new transformer that would support the trailers added next to the dry fuel storage building was reviewed and approved. A Document Revision Notice was submitted to update the Spill Prevention, Control and Countermeasure (SPCC) Plan and Pollution Incident Prevention Plan (PIPP).

Engineering Change (EC), EC 42425 for the dry fuel storage transition to Holtec was reviewed and approved.

Engineering Change (EC), EC 53984 for the construction of additional security owner controlled area (SOCA) fencing between the "A" and "B" cooling towers was reviewed and approved.

Engineering Change (EC), EC 46465 for equipment required for the Fukushima Flex project was reviewed for impact to the site's air emissions program.

Engineering Change (EC), EC-47490, for the emergency preparedness communication equipment associated with the Fukushima Flex project, was reviewed and approved.

Environmental review of the SOCA fence along the beach on the west side of the protected area (PA) was reviewed by the site and the State of Michigan Department of Environmental Quality (DEQ) for sand removal and maintenance activities required to maintain the functionality of the security fencing. An amendment to current permit #12-80-0060-P was requested by the site and approved by the DEQ.

Environmental review on the south east portion of the PNP property was reviewed by site personnel and the State of Michigan DEQ for critical dune requirements to support the addition of an effluent air sample station. A critical dune permit (Permit # 14-80-0036-P) was required, applied for, and granted to PNP for the installation of the air sample station.

Environmental review of the switchyard was completed by the site and the State of Michigan DEQ for activities required for switchyard expansion. Expansion to the north was approved. Westward expansion will require a Critical Dune Permit.

There were no additional changes, tests, or experiments that involved un-reviewed environmental questions or Environmental Protection Plan (EPP) changes.

3.0 ADDITIONAL ACTIVITIES AUTHORIZED UNDER NPDES

No additional activities were authorized under the NPDES permit. A new NPDES permit was issued to PNP on September 30, 2014, superseding the sites previous permit. Admin 4.22, "Nonradiological Environmental Program," COP-31, "Nonradiological Environmental Operating Procedure," and the Site Storm Water Pollution Prevention Plan were revised to incorporate the new NPDES changes. The new NPDES permit expires October 1, 2018.

4.0 UNUSUAL ENVIRONMENTAL EVENTS

In May 2014, PNP had one reportable spill when the safeguards transformer (EX-07) developed a leak. The required immediate and follow-up reports were made to the State of Michigan. The oil was contained to the immediate area and did not reach any waterways or ground water. Following repairs to the transformer, the oil collection separator from the transformer berm was cleaned out and the ground around the transformer was remediated.

5.0 ENVIRONMENTAL MONITORING

Documentation of the effect of cooling tower operation on meteorological variables was required for two years following the conversion from the once-through cooling system to the cooling towers. Because the cooling towers have been in operation for 40 years, meteorological monitoring and other monitoring activities related to the cooling towers were not required during 2014.

TruGreen treated other areas of the property for vegetation management during 2014. Rose Pest Solutions treated areas of the property for tick and pest control. Herbicides were not applied to the transmission line exit corridor in 2014. The application of herbicides and pesticides is documented in Attachment 2.

6.0 NON-ROUTINE REPORTS

During 2014, there was one non-routine report generated for the safeguards transformer (EX-07) leak.

**ATTACHMENT 2
HERBICIDE AND PESTICIDE TREATMENTS**

Company: TruGreen
9077 Portage Industrial
Portage, Michigan 49024-9935

Date of Treatment: April 14, 2014	(180 pounds applied)
June 03, 2014	(28 gallons applied)*
July 26, 2014	(2.5 gallons applied)*
August 22, 2014	(180 pounds applied) (.5 gallons applied)*
September 26, 2014	(1 gallon applied)*
October 01, 2014	(28 gallons applied)*
November 26, 2014	(180 pounds applied)

*These volumes are the active chemicals used and do not include the dilution water.

Commercial Names of Products in Solution: TruPower 3, Razor, Barricade,

Chemical Names of Products:

TruPower 3- Triisopropanolamine Salt of 2, 4-Dichlorophenoxyacetic Acid,
Dimethylamine Salt of (+)-R-2-(2-Methyl-4-Chlorophenoxy) propionic acid,
Dicamba Acid

Razor: -Glyphosate, N(phosphonomethyl) glycine, in the form of its isoprophlamine salt,
Ethoxylated Tallowamines

Barricade: - Attapulgite Clay, Crystalline Silica, Quartz, Propylene Glycol, Prodiamine

Urea, Nitrogen, Potash - Fertilizer 17-0-5, 25-0-8, 16-0-4 All Mineral

Concentration of Active Ingredient in Field Use Mix:

One solution was mixed together that contained the following:

25 oz. per 50 gallons per acre (TruPower 3) applied to 2.3 acres

Diluting Substance: Water for wet applications
No dilutions for dry applications

Rate of Application: 50 gallons per acre liquid application (TruPower 3, Barricade)
87 gallons per acre liquid application (Razor)
204 lbs per acre applied of dry fertilizer

Total Amount Used: 60 Gallons total volume used for liquid treatment*
540 Pounds total volume used for dry treatment

Method of Application: Hand sprayer for liquids
Broadcast spreader for dry application

Frequency of Application: Throughout the year as needed

Location: Along and near roadways, fence lines, walkways, parking lots, containment areas, substations, cooling towers, protected area, and microwave zones.

Purpose of Treatment: Fertilizer and control of weed species, crabgrass, nuisance vegetation, nuisance broadleaf vegetation

*This total volume is for the active chemicals used and does not include dilution water.

Company: Rose Pest Solutions
2714 South 11th St. Ste B
Niles, Michigan 49120-4420

Date of Treatment: May 12, 2014	(1.5 Gallons applied)
May 12, 2014	(40 grams applied)
May 17, 2014	(3.0 gallons applied)
June 13, 2014	(0.5 gallons applied)
July 14, 2014	(0.5 gallons applied)
September 24, 2014	(1.0 gallon applied)

Commercial Names of Products in Solution: Talstar Pro, and Final all-Weather Blox

Chemical Names of Products:

Talstar Pro - Bifenthrin (2-methyl [1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

Final AW Blox - Brodifacoum [3-[3-(4'-Bromo-[1,1'-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzopyran-2-one]

Concentration of Active Ingredient in Field Use Mix:

One solution was mixed together that contained the following:

1.28 fluid oz. of the two chemicals per gallon of water

Diluting Substance: Water for wet applications
No dilutions for dry applications

Total Amount Used (active ingredient amounts):

6.50 Gallons total volume used for liquid treatment
40 Grams total volume used for dry treatment

Method of Application: Hand sprayer for liquids
Bait Station Installation for dry application

Frequency of Application: Throughout the year as needed

Location: Along and near roadways, fence lines, walkways, and the protected area.

Purpose of Treatment: Tick and Mice control