Entergy

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PNP 2014-045

April 17, 2014

Facility Operating License
Appendix B, Section 5.4.1

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

Subject: 2013 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 2013. 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, 2013, through December 31, 2013.

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

Sincerely,

OWG/bed

Attachment: 1. 2013 Annual Non-radiological Environmental Operating Report
2. Herbicide Treatments

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

ATTACHMENT 1

2013 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, 2013, through December 31, 2013.

The PNP operated for 7,592 hours and produced a net total of 6,041,696 MWHe during 2013. This represents 85.7 % of the net demonstrated capacity of the design electric rating of 805 MWe.

2.0 ENVIRONMENTAL IMPACT EVALUATIONS

Five engineering change documents were evaluated per Entergy Nuclear Operations, Inc. (ENO) procedure, EN-EV-115, "Environmental Reviews and Evaluations," during 2013.

Engineering Change (EC), EC 38526 was reviewed for a fiber optic cable installation from the switchyard relay house to a junction box on the access road near the parking lot entrance. A critical dune permit was required, and obtained, from the State of Michigan.

Engineering Change (EC), EC 42423 for the widening of the gate entering the station independent spent fuel storage installation (ISFSI) pad, was reviewed and approved.

Engineering Change (EC), EC 42424 for the construction of the equipment storage building next to the training building parking lot, was reviewed and approved.

Engineering Change (EC), EC 46465 for the diesel driven pumps and equipment required for the Fukushima Flex project, was reviewed for impact to the sites air emissions program.

Engineering Change (EC), Admin EC, for the installation of more manways to the storm water outfall system near the training building and dry fuel storage building, was reviewed and approved.

There were no changes, tests, or experiments that involved an unreviewed environmental question and no EPP changes were required.

3.0 ADDITIONAL ACTIVITIES AUTHORIZED UNDER NPDES

A new drift study was performed for the "A" cooling tower that was replaced in 2012. The completed drift study provided satisfactory results that were less than the requested max design limits that were based on industry best practices.

4.0 UNUSUAL ENVIRONMENTAL EVENTS

No unusual environmental events occurred during 2013.

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 39 years, meteorological monitoring and other monitoring activities related to the cooling towers were not required during 2013. A new drift study was completed for the new cooling tower placed in service in April 2012 with satisfactory results. Herbicides were not applied to the transmission line exit corridor in 2013.

TruGreen treated other areas of the property for vegetation management during 2013. The application of herbicides is documented in Attachment 2.

6.0 NON-ROUTINE REPORTS

During 2013, no non-routine reports were generated.

ATTACHMENT 2

HERBICIDE TREATMENTS

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

Date of Treatment:	May 14, 2013	(200 pounds applied)
	May 14, 2013	(120 gallons applied)
	May 31, 2013	(120 gallons applied)
	June 25, 2013	(300 gallons applied)
	July 29, 2013	(300 gallons applied)
	August 30, 2013	(300 gallons applied)
	October 30, 2013	(200 pounds applied)

Commercial Names of Products in Solution: Dimension, Tru Power 3, Pendulum, Razor, Barricade, Tripower

Chemical Names of Products:

Dimension - Dimethyl 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-3, 5-pyridinedicarbothioate)

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

Pendulum-Pendimethalin: (1-ethylpicopial) –(3,4-Dimethyl-2,6 dinitrobenzenizimine)

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

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

Tripower: Dimethyliamine salt of 2- methyl 4-chloicophenoxy acid, Dimethalyne salt of (+)-R-2-(2-methl-4-chlorophynoxy)proprionic acid, Dimethylamine salt of Dicamba (3,6-Dichloro-o-anisic acid)

Concentration of Active Ingredient in Field Use Mix:

One solution was mixed together that contained the following:
25 oz. per 50 gallons per acre (Tru power 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 (Tru power 3, Tripower, Barricade, Dimension)
87 gallons per acre liquid application (Razor, Pendulum)
204 lbs per acre applied of dry fertilizer

Total Amount Used: 1140 Gallons total volume used for liquid treatment
400 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, control of weed species, crabgrass, nuisance vegetation, nuisance broadleaf vegetation