



Entergy Nuclear Operations, Inc.
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Licensing Manager

PNP 2013-042

April 23, 2013

Facility Operating License
Appendix B, Section 5.4.1

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

Subject: 2012 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 2012. 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, 2012, through December 31, 2012.

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

Sincerely,

A handwritten signature in black ink, appearing to read "OWG", with a long horizontal line extending to the right.

OWG/bed

Attachment: 1. 2012 Annual Non radiological Environmental Operating Report
2. Herbicide Treatments

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

ATTACHMENT 1

2012 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, 2012, through December 31, 2012.

The PNP operated for 6,770 hours and produced a net total of 5,178,213 MWh during 2012. This represents 73.2% of the net demonstrated capacity of the design electric rating of 805 MWe.

2.0 ENVIRONMENTAL IMPACT EVALUATIONS

Three engineering change documents were evaluated per Entergy Nuclear Operations, Inc. (ENO) procedure, EN-EV-115, "Environmental Reviews and Evaluations," during 2012.

Engineering Change (EC) EC29765 for a H2 Auto-Shutoff valve being installed was reviewed and approved.

Engineering Change (EC), EC 39579 for the Erection of Permanent Building around 4160V Bus F (EA-23) & Bus G (EA-24) Switchgear House was reviewed and approved to allow construction of the building.

Engineering Change (EC), EC 40702 which modifies the supply and return diesel fuel oil lines connecting the 1-3 Supplemental Diesel Generator (M-1005) and its stationary fuel oil tank (T-1001), 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

The Alpha Cooling Tower was replaced. A new drift study is being performed to allow for calculations related to the amount of water that the new tower disperses.

4.0 UNUSUAL ENVIRONMENTAL EVENTS

No unusual environmental events occurred during 2012.

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 38 years, meteorological monitoring and other monitoring activities related to the cooling towers were not required during 2012. A new drift study is being performed for the new cooling tower placed in service in April 2012. Herbicides were not applied to the transmission line exit corridor in 2012.

TruGreen treated other areas of the property for vegetation management during 2012. The application of herbicides is documented in Attachment 2.

6.0 NON-ROUTINE REPORTS

During 2012, no non-routine reports were generated.

ATTACHMENT 2

HERBICIDE TREATMENTS

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

Date of Treatment: April 10, 2012	(120 gallons applied)
May 11, 2012	(120 gallons applied)
June 8, 2012	(300 gallons applied)
June 14, 2012	(120 gallons applied)
July 23, 2012	(300 pounds applied)
August 28, 2012	(300 gallons applied)
August 30, 2012	(120 gallons applied)
October 27, 2012	(120 gallons applied)

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

Chemical Names of Products:

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

Merit- 1-((6-Chloro-3-pyridinyl) methyl)-N-nitro-imidazolidinimine

Tru power 3- Triisopropanolamine Salt of 2, 4-Dichlorophenoxyacetic Acid

Polaris- Isopropylamine of salt imazapyr: (2-(4,5-Dihydro-4-Methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl)-3 Pyridinecarbozylic acid)

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

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

Barricade: - Prodiamine

Tripower: Dimethylamine salt of 2- methyl 4-chloicophenoxy acid, Dimethalyne salt of (+)-R-2-(2-methl-4-chlorophynoxy)propionic 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:

12 oz. per 50 gallons per acre (Merit) applied to 2.3 acres

Two solutions were 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 (Merit, Tru power 3, Tripower, Barricade, Dimension)

87 gallons per acre liquid application (Razor, Pendulum, Polaris)

204 lbs per acre applied of dry fertilizer

Total Amount Used: 1200 Gallons total volume used for liquid treatment

300 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