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HDI PNP 2023-018

RFOL Appendix B 5.4.1

April 25, 2023

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

Palisades Nuclear Plant
Docket Nos. 50-255
Renewed Facility Operating License No. DPR-20

Subject: 2022 Annual Non-Radiological Environmental Operating Report

In accordance with the requirements of Palisades Nuclear Plant (PNP) Renewed Facility Operating License (RFOL) Appendix B, *Environmental Protection Plan (Non-Radiological)*, section 5.4.1, *Routine Reports*, Holtec Decommissioning International, LLC (HDI) on behalf of Holtec Palisades, LLC (Holtec Palisades) is submitting the 2022 Annual Non-Radiological Environmental Operating Report for PNP. The enclosed report describes the implementation of the Environmental Protection Plan from January 1, 2022, through December 31, 2022

This letter contains no new and no revised regulatory commitments.

Should you have any questions or require additional information, please contact Jim Miksa, Regulatory Assurance Engineer at (269) 764-2945.

Respectfully,

Jean A. Fleming

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Date: 2023.04.25 09:45:28 -04'00'

Jean A. Fleming
Vice President, of Licensing, Regulatory Affairs & PSA
Holtec International

Enclosure: Palisades Nuclear Plant Annual Non-Radiological Environmental Operating Report

Attachment 1: Herbicide and Pesticide Treatments

cc: NRC Region III Regional Administrator
NRC Decommissioning Inspector – Palisades Nuclear Plant
NRC NMSS Project Manager – Palisades Nuclear Plant

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Enclosure to
HDI PNP 2023-018
Palisades Nuclear Plant
Annual Non-Radiological Environmental Operating Report

2022 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, 2022, through December 31, 2022.

The PNP operated for 3,351.0 hours and produced a net total of 2,730,230 MWHe during 2022. This represents 101.2% of the net demonstrated capacity of the design electric rating of 805 MWe. The design electric rating is an average over the course of a year. In 2022 Palisades was removed from service on May 20th at 15:57 which led to a majority of the unit's operating period being in the colder months when the capacity will typically be higher than 805 Mwe, due to condenser efficiency.

2.0 ENVIRONMENTAL IMPACT EVALUATIONS

During 2022, there were three projects that were reviewed in the Environmental Review process in accordance with EN-EV-115. The Engineering Changes are as follows:

Engineering Change (EC), CCDECP-PAL-0001 was performed to support installation of a security fence at the south end of the protected air of the site. All work was performed in previously disturbed and paved areas within the Protected Area (PA). No state or environmental permitting was required and there were no environmental impacts or concerns. The EC and fence modification were completed in 2022.

Engineering Change, CCDECP-PAL-0003 was performed to remove the cooling towers from service by removing the riser pipes and back filling with sand. Environmental review of the work determined an amendment to the NPDES permit or regulatory review was not required. It was also determined the work could be performed without disturbing the critical dunes near the cooling towers, therefore no negative environmental impacts. The EC and the work were completed in 2022.

Demolition of two buildings within the protected area of the site was also reviewed for environmental impacts. Both are located in previously paved areas and the areas will remain paved following demolition, and demolition will be performed within demolition guidelines. Therefore, it was determined there would be no negative environmental impacts.

There were no additional changes, tests, or experiments that involved un-reviewed environmental questions or EPP changes.

3.0 ADDITIONAL ACTIVITIES AUTHORIZED UNDER NPDES

In-accordance with the department of Environment, Great Lakes and Energy (EGLE) requirements a NPDES permit application renewal was applied for and verified as being received by the State of Michigan prior to required due dates. Palisades' new NPDES permit has not been received from the State of Michigan at this time; however, by

submitting by the required due date, IAW the process Palisades is still covered under the old NPDES permit. No changes at this time are expected to the permit. No additional activities were authorized under the National Pollutant Discharge Elimination System (NPDES) permit. As of this report being written, the department of Environment, Great Lakes, and Energy (EGLE), has contacted the site with a number of questions, as they are in the process of submitting a draft of the new NPDES permit to the site for review as part of the renewal process. A new permit is expected to be implemented in 2023.

The Air Operating Permit renewal application package is due to the State of Michigan by August 4th, 2023, in accordance with the renewal process requirements (Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A.451 of 1994 and the federal Clean Air Act of 1990).

4.0 UNUSUAL ENVIRONMENTAL EVENTS

No unusual environmental events occurred during 2022.

5.0 ENVIRONMENTAL MONITORING

The site Buildings and Grounds crew, along with the Security department treated areas of the property for vegetation control and security needs during 2022. Rose Pest Solutions treated areas of the property for tick and pest control. Herbicides were not applied to the transmission line exit corridor in 2022. The application of herbicides and pesticides is documented in Attachment 1.

The site continues to purchase an over-the-counter solution of herbicide for weed control, that was approved by Chemistry/Environmental. The approval was given in accordance with site procedure Admin 4.22, Environmental Protection Plan (Non-Radiological). Only premixed ready-to use products are purchased and applied. If the product being used is changed, approval prior to use is required by the Chemistry/Environmental department.

6.0 NON-ROUTINE REPORTS

During 2022, no non-routine reports were generated.

HERBICIDE & PESTICIDE TREATMENTS

Company: Holtec – Palisades
Building and Grounds
27780 Blue Star Memorial Highway
Covert, Michigan 49043

Date of Treatment: July 20, 2022	(26.4 oz. Active Ingredient) (6.50 gallon total applied)
August 17, 2022	(10.8 oz. Active Ingredient) (2.66 gallon total applied)
August 25, 2022	(16.2 oz. Active Ingredient) (3.99 gallon total applied)

Commercial Names of Products in Solution:

Roundup® Ready-To-Use Extended Control Weed & Grass Killer Plus Weed Preventer II

Chemical Names of Products:

Roundup® Ready-To-Use Extended Control Weed & Grass Killer Plus Weed Preventer II -
Nonanoic and related fatty acids; {Pelargonic and related fatty acids} Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate} Ammonium salt of 2-[4,5-dihydro-4-methyl-4-(1-methyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid; {Ammonium salt of imazapic}

Roundup® Concentrate Extended Control Weed & Grass Killer Plus Weed Preventer -
Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate} 6,7-Dihydrodipyrido(1,2-a:2',1'-c) pyrazinedium dibromide; {Diquat dibromide} Ammonium salt of 2-[4,5-dihydro-4-methyl-4-(1-methyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid; {Ammonium salt of imazapic}

Concentration of Active Ingredient in Field Use Mix:

4.06 oz of active ingredient per 1 gallon of (Roundup® Ready-To-Use Extended Control Weed & Grass Killer Plus Weed Preventer II) applied to 300 square feet.

Diluting Substance:

No dilution was performed for Roundup Ready-to-use Extended Control Weed & Grass Killer plus Weed Preventer II as product is purchased in ready to use concentrations.

Rate of Application:

1 gallon per 300 square feet liquid application (Roundup® Ready-To-Use Extended Control Weed & Grass Killer Plus Weed Preventer II)

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Attachment 1

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Total Amount Used:

15.3 gallons total volume used for liquid treatment of roundup ready-to-use extended control weed & Grass Killer Plus Weed Preventer II (62.1 oz. of active ingredient)

Method of Application:

Hand sprayer for liquids

Frequency of Application:

Throughout the year spot treatments 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.

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

Date of Treatment:	Jan 10, 2022	(80 grams applied)
	Feb 28, 2022	(100 grams applied)
	Mar 14, 2022	(420 grams applied)
	Mar 28, 2022	(80 grams applied)
	April 11, 2022	(80 grams applied)
	April 25, 2022	(640 grams applied)
	May 4, 2022	(4.5 gallons applied)
	May 9, 2022	(320 grams applied)
	May 23, 2022	(120 grams applied)
	June 13, 2022	(260 grams applied)
	July 11, 2022	(260 grams applied)

Commercial Names of Products in Solution:

Final All-Weather Blox

Talstar Pro

Chemical Names of Products:

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]

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

Concentration of Active Ingredient in Field Use Mix:

One solution was mixed together that contained the following:

1.00 fluid oz. of the chemicals per gallon of water

Diluting Substance:

No dilutions for dry applications

Total Amount Used (active ingredient amounts):

2360 Grams total volume used for dry treatment

4.5 Gallons total volume used for liquid treatment

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

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Frequency of Application:

Throughout the year as needed.

Location:

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

Purpose of Treatment:

Tick, Mice and Roach control