HOLTEC PALISADES

27780 Blue Star Highway
Covert, MI 49043

PNP 2026-030

PNP RFOL Appendix B 5.4.1

April 16, 2026

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

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

Subject: Correction to the 2025 Annual Non-Radiological Environmental Operating Report

Reference: Holtec Palisades, LLC letter to U.S. Nuclear Regulatory Commission, *2025 Annual Non-Radiological Environmental Operating Report,* dated March 25, 2026 (ADAMS Accession No. ML26084A299)

By letter dated March 25, 2026 (Reference), Holtec Palisades, LLC submitted the 2025 Annual Non-Radiological Environmental Operating Report (ANREOR) for the Palisades Nuclear Plant (PNP) in accordance with PNP Renewed Facility Operating License Appendix B, *Environmental Protection Plan (Non-Radiological)*, Section 5.4.1, *Routine Reports.* The report described the implementation of the Environmental Protection Plan for the 12-month period from January 1, 2025 through December 31. 2025.

Following submittal of the 2025 ANREOR, it was discovered that a company which provides chemicals used for fertilization and weed control was not reported in Section 5.0 of the Enclosure or in the Enclosure Attachment. This oversight has been corrected and is provided in this submittal. The corrected report is enclosed, and the revisions are identified by revision bars in the right-hand margin. This corrected report replaces the PNP 2025 ANREOR in its entirety.

This letter contains no new and no revised regulatory commitments.

Should you have any questions or require additional information, please contact me at (269) 764-2375.

Respectfully,

Kami J. Miller

Digitally signed by Kami J. Miller
DN: cn=Kami J. Miller, c=US, o=Holtec Palisades, email=kmiller1@holtec.com
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Kami Miller
Director, Regulatory
Holtec Palisades

Enclosure: Palisades Nuclear Plant – 2025 Annual Non-Radiological Environmental Operating Report

Enclosure Attachment: Herbicide and Pesticide Treatments

cc: NRC Region III Regional Administrator
NRC Project Manager – Palisades Nuclear Plant
NRC Senior Resident Inspector – Palisades Nuclear Plant

Enclosure

PNP 2026-030

Palisades Nuclear Plant

2025 Annual Non-Radiological Environmental Operating Report

2025 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 for this report is January 1, 2025, through December 31, 2025.

PNP operated for 0 hours and produced a net total of 0 MWHe during 2025. PNP was removed from service on May 20, 2022 at 15:57.

2.0 ENVIRONMENTAL IMPACT EVALUATIONS

During 2025, there were ten projects that were reviewed in the Environmental Review process in accordance with DSP-EN-001. The Engineering Changes are as follows:

Driven by the State of Michigan's commitment to expand in-state carbon-free generation, the site has started a program to build their first two SMR-300 reactor units at the PNP site. A Soil Erosion and Sedimentation Control Permit was obtained by the Van Buren County Drain Commissioner prior to the start of the site upgrade for construction of the SMR-300 reactor units. In preparation for expansion, the site has cleared trees in the area slated for the SMR-300 reactor units. This area was located within the Covert Township Environmentally sensitive area but not in a High-Risk Erosion Area or Environmental Area as defined by the Michigan Department of Environment and Great Lakes Energy (EGLE). The tree clearing is scheduled to be completed in 2026.

Engineering Change (EC)-93328 was evaluated to install new electrical cables for the Cooling Towers. In support of the PNP restart effort, new power cables are being routed from the 4160V F&G Switchgear Building to the A & B Cooling Towers, replacing existing cables that have physically degraded. The cables will be routed in Plastibeton trenches and buried conduits. Spare buried conduits will also be provided for future use. This proposed activity requires excavation in protected dunes requiring a critical dune permit (WRP043992) with EGLE. The EC and new electrical cable installation were completed in 2025.

EC-93401, EC-93402, EC-93403, and EC-93556 reviews were performed to implement a new fiber optic network infrastructure across the plant to improve network reliability, capacity, coverage and performance. All new infrastructure implemented is designed in accordance with commercial codes, site procedures, manufacturer-specific instructions such as the Corning Installations Guidelines and standards such as NFPA 70. The project utilized directional boring for the installation of a fiber optic cable below grade with associated access pedestals. Excavated dune sand not replaced within the ground disturbance area will be spread over the surrounding area to a depth no greater than 6 inches to allow for continued growth of existing dune grass. Impacts to the existing vegetation are proposed only in areas requiring directional boring that is necessary to access the work site. Vegetation impacts will be limited to the directional boring locations, access pedestals, and adjacent working space. EGLE Permit WRP045659

certified that the activities authorized under this permit are in compliance with the state requirements. The EC and fiber optic modifications are scheduled to be completed in 2026.

EC-93756 was evaluated for a Temporary Modification for Bulk Hydrogen Storage. This EC will install a temporary hydrogen trailer, one injection point to the station Hydrogen supply line, and two additional isolation valves, one new tee and additional fittings to connect to the existing aboveground bulk storage system piping. This temporary modification only interfaces with the bulk hydrogen storage system and will satisfy the existing requirements of the system. The EC and temporary modification for bulk hydrogen storage is scheduled to be completed in 2026.

EC-93794 was performed to support Temporary Installation of a Water Processing System. This temporary system will be fed by the non-critical service water system and will supply the demineralized water to the condensate storage tank, T-2, and the primary system Make-up Storage Tank, T-81. This temporary modification is governed by 10 CFR 50.59 since it is expected that part of the modification will be made permanent. This EC and Temporary installation of the Water Processing System is scheduled to be completed in 2026.

EC-93350 was performed to install a new building and foundation for the Digital Controls Staging Area (DCSA) Building. This proposed activity involves construction, demolition or abandonment in place of any site or non-generating facility buildings or structures. The EC, new building, and foundation modifications were completed in 2025.

Reauthorization of MDEQ Permit 09-80-0058-P was obtained in 2025 for maintenance activities permitted in EGLE Permit WRP020704. EGLE Permit WRP020704 expired on April 16, 2025. The requested maintenance activities involve the periodic removal of deposited sand above and below the ordinary high-water mark of Lake Michigan and in critical dunes along the permitted security fence and other infrastructure, as well as stormwater outfall structures that discharge into Lake Michigan. The maintenance activities associated with the security fences and other security infrastructure would involve the potential placement of sand to repair dune blowouts, and the potential removal of wind-blown sand to maintain the effective height and stability of the structures. The maintenance activities associated with the stormwater outfalls would involve the potential removal of windblown sand and/or wave deposited sand to maintain positive drainage around the structures. Any sand removed because of this ongoing grade maintenance will be placed elsewhere on the property outside of the Great Lakes bottomlands. Dredging below the ordinary high-water mark of Lake Michigan is only anticipated during periods of low water, such as observed water levels in 2008 and 2012, which were up to 3 feet below the Long-Term Annual Average as reported by USACE. In those conditions, a cumulative maximum of 500 CY dredging would occur to the minimum amount necessary to maintain the efficacy of the security features below the OHWM and maintain the ability to discharge stormwater into Lake Michigan. Dimensions of each potential dredge activity are listed in the specific dredge section of this form. If additional dredging is anticipated, the applicant proposes additional permitting/consultation with EGLE and USACE to discuss appropriate measures to address the future condition. The proposed project seeks re-authorization of activities

under previous permits to maintain critical infrastructure within Critical Dunes and Great Lakes Bottomlands. Under NRC requirements, Palisades Energy, LLC (Palisades Energy) must institute immediate compensatory measures when constructed security measures such as vehicle barriers and fences are observed to be near their design limits. Accumulation of windblown sand or wind erosion of sand, that changes the effective height of security measures about the ground surface has the potential to create situations where security measures are near their design limits. Because these occurrences must be resolved quickly, alternatives such as the installation of additional or different height structures is not a prudent alternative. This permit will expire in 2030.

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 EGLE requirements a National Pollutant Discharge Elimination System (NPDES) permit application renewal was applied for and verified as being received by the State of Michigan prior to the required due dates. The new PNP NPDES permit was received from the State of Michigan in 2025. The permit included several revisions. Reporting the total number of minutes per day that the final effluent temperature is greater than 80°F was added due to temperature criteria for several fish species that reside in Lake Michigan being evaluated and revealed acute concerns at temperatures greater than 80°F. The sample type for final effluent temperature and intake temperature was changed from reading to continuous. An updated Thermal Plume Study is to be completed after normal power operations resume at the plant to confirm that the thermal discharge conditions have not changed significantly since the last study from 2003. Final effluent limitations and monitoring requirements for Hydrazine specify an effective due date of 90 days from the permit effective date of the Pollutant Minimization Program submittal. The Effluent limitations and monitoring requirements apply when water treatment additives containing Hydrazine are used and discharged. Lastly, the expiration date was changed from October 1, 2028 to October 1, 2029 due to the delay in issuance of the permit, to allow the permit to be effective for closer to five years.

EGLE was sent a Water Quality Certification request from Holtec Decommissioning International, LLC under Section 401 of the Federal Clean Water Act regarding the proposed NRC license amendment associated with the resumption of power operations at PNP. The restart of power operations is expected to result in a return to pre-shutdown levels of noncontact cooling water, cooling tower blowdown, and treated low volume wastewater discharge from the plant.

The Air Operating Permit renewal application package was submitted and received by the State of Michigan prior to the required due date in accordance with Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A.451 of 1994 and the federal Clean Air Act of 1990. Palisades Energy has received confirmation that the Air Operating Permit application is administratively complete, has been granted an application shield pursuant to Rule 217(1)(a) from EGLE, and therefore the existing permit will not expire until the

renewal permit has been issued or denied. The new Air Operating Permit for PNP is expected to be received from the State in 2026.

4.0 UNUSUAL ENVIRONMENTAL EVENTS

No unusual environmental events occurred during 2025.

5.0 ENVIRONMENTAL MONITORING

The site Building and Grounds department treated areas of the property for vegetation control and security needs during 2025. North Shore Pest Control, Inc. was employed to treat areas of the property for ticks and rodents as well as vegetation control. TruGreen was employed in the fall to fertilize, and control weed species, crabgrass, nuisance vegetation, and broadleaf vegetation throughout the plant. The application of herbicides and pesticides is documented in the Enclosure Attachment.

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 CHM-512, 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. Concentrated products were applied by a certified vendor IAW industrial site application requirements.

6.0 NON-ROUTINE REPORTS

During 2025, one non-compliance report was generated, and one violation notice was generated.

Non-Compliance communication (CC-006411) documents notification to EGLE staff upon discovery that the Sodium Bisulfite feed rate was greater than the permit language of 1.5 times the stoichiometric amount of Total Residual Oxidant used at a concentration. Adjustments to the Sodium Bisulfite feed were made immediately upon discovery to be within permit limits and corrective actions were implemented to ensure that Sodium Bisulfite limits are met during all future chlorination treatments.

Violation Notice (VN-018339) documented an exceedance for Hydrazine above the NPDES Permit limit. The exceedance occurred during cleaning of PNP's two steam generators in preparation for plant restart. The PNP staff discovered solution from the steam generator cleaning process in the turbine sump during normal monitoring of the Alpha Steam Generator (the first of the two steam generators to be cleaned). At the time of discovery, PNP staff temporarily secured the turbine sump system and commenced sampling of the outfall. Initial samples indicated that all analyses were less than the permit limits for intermittent discharge at monitoring point 001A; therefore, the turbine sump system was restored and the discharge continued. The source of the leak was a leaking check valve into a portion of the system that the chemical was not expected to reach. This portion of the system had drain valves open to support ongoing maintenance on the equipment. Sampling continued during the remainder of the day

and into the evening while remaining chemicals in the sump were addressed. For approximately three and a half hours, samples for Hydrazine exceeded the permit limit of 32ug/L. The highest recorded concentration during the exceedance window was 59 ug/L and the average was 42.7 ug/L. Corrective actions were implemented to prevent recurrence when performing cleaning of the Bravo Steam Generator (the second of the two steam generators to be cleaned).

Enclosure Attachment

PNP 2026-030

Herbicide and Pesticide Treatments

HERBICIDE and PESTICIDE TREATMENTS

Company: North Shore Pest Control Inc.
PO Box 268
South Haven, MI 49090

Date of Treatment:		
	January 17, 2025	(3.60 grams Active Ingredient) (0.0079 pounds total applied)
	February 19, 2025	(3.60 grams Active Ingredient) (0.0079 pounds total applied)
	March 19, 2025	(4.50 grams Active Ingredient) (0.0099 pounds total applied)
	April 11, 2025	(0.15 grams Active Ingredient) (0.00033 pounds total applied)
	April 11, 2025	(0.1 oz Active Ingredient) (0.0008 gallons total applied)
	April 16, 2025	(115.2 ounces Active Ingredient) (15 gallons total applied)
	April 16, 2025	(4.50 grams Active Ingredient) (0.0099 pounds total applied)
	April 17, 2025	(39.36 ounces Active Ingredient) (6.75 gallons total applied)
	April 28, 2025	(22.16oz Active Ingredient) (5.25 gallons total applied)
	May 13,2025	(2 oz Active Ingredient) (0.078 gallons total applied)
	May 14, 2025	(31.09 oz Active Ingredient) (3.67 gallons total applied)
	May 19, 2025	(42.24 oz Active Ingredient) (7.5 gallons total applied)
	June 11,2025	(21.12oz Active Ingredient) (11 gallons total applied)
	June 16, 2025	(180.48 oz Active Ingredient) (25.5 gallons total applied)
	June 18, 2025	(2.1 oz Active Ingredient) (0.016 gallons total applied)
	June 18, 2025	(2.25 grams Active ingredient) (0.50 pounds total applied)
	July 11, 2025	(0.2 oz Active Ingredient) (0.0016 gallons total applied)
	July 15, 2025	(199.68 oz Active Ingredient) (28 gallons total applied)
	July 15, 2025	(1.8 grams Active Ingredient) (0.4 pounds total applied)
	July 17, 2025	(6.24 oz. Active Ingredient) (3.25 gallons total applied)
	July 23, 2025	(0.84 grams Active Ingredient) (0.19 pounds total applied)
	July 23, 2025	(17.05 oz. Active Ingredient)

	(1.75 gallons total applied)
August 12, 2025	(10.65 oz Active Ingredient)
	(4 gallons total applied)
August 19,2025	(199.68oz Active Ingredient)
	(28 gallons total applied)
August 19, 2025	(0.9 grams Active Ingredient)
	(0.2 pounds total applied)
August 28, 2025	(30.72 oz Active Ingredient)
	(4 gallons total applied)
August 29, 2025	(6.4 oz Active Ingredient)
	(0.5 gallons total applied)
September 22, 2025	(165.12oz Active Ingredient)
	(23.5 gallons total applied)
September 22, 2025	(0.9 grams Active Ingredient)
	(0.2 pounds total applied)
September 23, 2025	(1.85oz Active Ingredient)
	(0.13 ounces total applied)
October 13, 2025	(1.92oz Active Ingredient)
	(0.25 gallons total applied)
October 15, 2025	(1.2 grams Active Ingredient)
	(0.26 pounds total applied)
November 21, 2025	(1.2grams Active Ingredient)
	(0.26 pounds total applied)
December 18, 2025	(1.2 grams Active Ingredient)
	(0.26 pounds total applied)

Commercial Names of Products in Solution:

Talstar Pro, Fastrac all weather Blox, Demand CS Insecticide,Tempo 1% Dust insecticide ready to use, Alpine WSG, Advion ant Bait Arena MaxForce Ant Disc, Termidor SC

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

Fastrac All Weather Blox – Bromethalin [N-Methyl-2,4-dinitro-N-(2,4,6-tribromophenyl)-6-(trifluoromethyl)benzenamine]

DEMAND CS INSECTICIDE – lambda-cyhalothrin, Hydrocarbons, C9, Aromatics, propane-1,2-diol, orthophosphoric acid, dioxosilane, 1,2-benzisothiazol-3(2H)-one

TEMPO® 1% DUST INSECTICIDE READY TO USE – Cyfluthrin, Crystalline quartz (respirable)

Alpine WSG – Dinotefuran

ADVION ANT BAIT Arena – indoxacarb

MaxForce FC Ant Disc – Fipronil

Termidor SC – (Fipronil(ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl0sulfinyl}-1H-pyrazole-3-carbonitrile

Concentration of Active Ingredient in Field Use Mix:

Diluting Substance:

No dilutions for dry applications

Total Amount Used (active ingredient amounts):

1491.8 Grams total volume used for dry treatment
168.1 Gallons total volume used for liquid treatment

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

Frequency of Application:

Throughout the year as needed

Location:

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

Purpose of Treatment:

Tick, Flying Insects, Mice and Roach control.

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

Date & Treatment Amounts:

August 19, 2025	(1.6275 gallons applied)
August 19, 2025	(263.886 pounds applied)
September 16,2025	(0.1262 gallons applied)
September 16,2025	(263.886 pounds applied)
September 19,2025	(8.4979 gallons applied)
October 08, 2025	(1.8917 gallons applied)
October 22, 2025	(263.886 pounds applied)
October 22, 2025	(0.1578 gallons applied)

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

Commercial Names of Products in Solution: Oust XP, Sureguard SC, Finale XL T&O, Drive XLR8, Change up, Escalade 2, Induce, 25-0-8, 16-0-4 50%

Chemical Name of Products:

FINALE XL T&O- (GLUFOSINATE-AMMONIUM)

SUREGUARD SC HERBICIDE- (FLUMIOXAZIN)

DRIVE XLR8- (QUINCLORAC)

INDUCE- (Alkyl Aryl Polyoxylkane ethers, alkanolamides, dimethyl siloxane, and free fatty acids)

Oust XP- Sulfometuron methyl {MethyI2-[[[[(4,6-dimethyl-2-pyrimidinyl) amino J-carbon IJamino J-sulfonyl)benzoate }

Change Up – Dimethylamine salt of 2-Methyl-4-chlorophenoxyacetic Acid (MCPA DMA Salt), 1-Methylheptyl Ester of Fluroxypry, Dicamba Acid(3,6-Dichloro-o-anisic acid)

Escalade 2 – Dimethylamine salt of 2,4 Dichlorophenoxyacetic Acid, 1-Methylheptyl Ester of Fluroxypyr, Dicamba (3,6-Dichloro-o-anisic Acid)

Concentration of Active Ingredient in Field Use Mix:

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

Rate of Application:

Liquid: 0.5 gallons per thousand square feet liquid application (Drive XLR8, change up)
2 gallons per thousand square feet liquid application (Escalade 2, Induce, Finale XL, Sureguard SC, Oust XP)
Dry: 3 lbs. per 1000 ft2 applied (fertilizer)

Total Amount Used: 12.30 Gallons total volume used for liquid treatment ***
1847 Pounds total volume used for dry treatment
***Liquid volumes are the active chemicals used and do not include the dilution water.

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: Fertilize, and control of weed species, crabgrass, nuisance vegetation, broadleaf vegetation

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

Date of Treatment:

August 2, 2025 (2.75 gallons applied)

Commercial Names of Products in Solution:

Ortho Groundclear year long vegetation killer 2

Chemical Names of Products:

Ortho Groundclear year long vegetation killer 2 – 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}, Potassium Hydroxide

Concentration of Active Ingredient in Field Use Mix:

2.67 oz of active ingredient per 1 gallon (Roundup® Ready-To-Use Extended Control Weed & Grass Killer Plus Weed Preventer II) applied to 573 square feet.

Diluting Substance:

No dilution was performed for Ready-to-use Ortho Groundclear year long vegetation Killer 2 as products are purchased in ready to use concentrations.

Rate of Application:

1 gallon per 573 square feet liquid application (Ready-to-use Ortho Groundclear year long vegetation Killer 2)

Total Amount Used:

2.75 gallons total volume used for liquid treatment of roundup Ready-to-use Ortho Groundclear year long vegetation Killer 2 (7.36 oz. of active ingredient) over a total of 1575 square feet.

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