

The State of New Hampshire

Department of Environmental Services



Robert R. Scott, Commissioner

VIA EMAIL ONLY

May 29, 2019

Michael Henderson, President Prolerized New England Company, LLC 69 Rover Street Everett, MA 02149

Email: <u>mrhenderson@schn.com</u>

SUBJECT: Prolerized New England Company, LLC, 69 Rover Street, Everett, MA

Re-Issuance of Certified Waste Derived Product (CWDP) No. 9:

Propat® for Use as Alternate Daily Cover

Initial application rcv'd January 23, 2019; assigned Application No. 2019-36965

Dear Mr. Henderson:

The New Hampshire Department of Environmental Services, Waste Management Division (NHDES) has completed its review of the above-referenced application submitted by Prolerized New England Company, LLC (Prolerized). In its application Prolerized requested certification of a waste-derived product for distribution and use in New Hampshire, specifically, Prolerized requested certification of Propat® for use as alternate daily cover at lined landfills in New Hampshire. This request effectively seeks to supercede the previously approved Certified Waste Derived Product No. 9, Propat® for use as Alternative Daily Cover at RCRA Subtitle D Lined Landfills, dated July 2, 1999.

NHDES has approved the application, with conditions, and hereby re-issues Certified Waste-Derived Product No. 9 (enclosed) pursuant to RSA 149-M:9 and Part Env-Sw 1500 of the Rules. The certification being issued supersedes the certification issued July 2, 1999. Concurrent with the certification, NHDES is also issuing a description of our review of the application (Application Review Summary).

Any person aggrieved by this decision may file an appeal with the NH Waste Management Council (Council). Any such appeal must be filed directly with the Council in accordance with the Council's rules, Env-WMC 204, Appeals: Filing; Notice; Parties and Representatives; Scheduling; Motions. The appeal must be filed directly with the Council within 30 days of the date of this decision and must set forth fully every ground upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council. Information about the Council, including a link to the Council's rules, is available at https://www.nhec.nh.gov.

Mr. Michael Henderson, President Prolerized New England Company, LLC, Everett, MA Re-issuance of CDWP No. 9: Propat® for use as Alternate Daily Cover May 29, 2019 Page 2 of 2

If you have any questions regarding this approval, please contact the Solid Waste Management Bureau at (603) 271-2925 or solidwasteinfo@des.nh.gov.

Sincerely,

Solid Waste Management Bureau

Waste Management Division

Tel: (603) 271-5185

Email: jaime.colby@des.nh.gov

Waste Management Division, o=Solid Division

Digitally signed by Waste Management Division

Waste Division, ou=Waste Management

email=NELSON.ORDWAY@DES.NH.GOV, c=US

Date: 2019.05.29 13:47:22 -04'00'

encl. Certified Waste-Derived Product No. 9: Propat® for use as Alternate Daily Cover, dated May 29, 2019

Application Review Summary, dated May 29, 2019

Keri Fitzpatrick, Prolerized New England Company, LLC, email: kfitzpatrick@schn.com ec: Raymond C. Johnson, P.G., Tetra Tech, Inc., email: ray.johnson@tetratech.com



RECORD OF CERTIFIED WASTE-DERIVED PRODUCT APPROVAL

Issued by the NH Department of Environmental Services, Waste Management Division (NHDES) pursuant to RSA 149-M and Chapter Env-Sw 1500 of the New Hampshire Solid Waste Rules (Rules)

PRODUCT IDENTIFICATION: I.

Certified Waste-Derived Product No. 9 **Common Name:** Alternate daily cover

Trade Name: Propat®

General Use / Purpose: Alternate daily cover at authorized double-lined landfills

Product Description: Soil-like material produced using a patented process, and consisting of shredder

residue stabilized by cementitious material.

Waste Content: Residue, consisting of rubber, glass, plastic, fabric fibers, foam, and similar, produced during the shredding of end-of-life vehicles and other light iron, and processed to remove ferrous and non-ferrous metal.

Name and address of person having proprietary control of product: Prolerized New England Company, LLC, 69 Rover Street, Everett, MA 02149

II. FILE REFERENCE/RECORD OF APPLICATION FOR CERTIFICATION:

Applicant Name: Prolerized New England Company, LLC

Applicant Mailing Address: 69 Rover Street, Everett, MA 02149

Applicant Principal Business Address: 69 Rover Street, Everett, MA 02149

Application No. 2019-36965

Date(s) Received: January 23, 2019; and February 14, 2019

WMD Document Log #(s): 2019-36965-01 and 2019-36965-02, respectively

III. **TERMS AND CONDITIONS:** Attached.

IV. **AUTHORIZATION & SIGNATURE:** The waste-derived product identified above is hereby certified for distribution and use in New Hampshire, subject to all terms and conditions specified herein. This approval is based on information and representations provided to NHDES in the application identified in Section II above. If the information is false, misleading or incomplete, this certification may be revoked or suspended in accordance with Part Env-Sw 1509 of the Rules.

BY EXERCISING ANY RIGHTS UNDER THIS APPROVAL, THE USER HAS AGREED TO ALL TERMS AND CONDITIONS OF THE CERTIFICATION. Failure to comply with the terms and conditions of the certification may result in administrative, civil or criminal enforcement action and penalties, and suspension or revocation of the certification. No liability is incurred by the State of New Hampshire by reason of this certification. No warranty/guarantee is intended or implied by reason of any advice given by NHDES or its staff.

This certification shall not eliminate any person's obligation to obtain all requisite federal, state or local permits, licenses or approvals or to comply with all other applicable federal, state, district or local permits, ordinances, laws or approvals or conditions pertaining to production, distribution, use, and disposal of this certified waste-derived product.

Michael J. Wimsatt, P.G., Director Waste Management Division

May 29, 2019 **Effective Date**

Digitally signed by Environmental Services Environmental Services DN: cn=Environmental Services, o, ou=waste Management, email=pamela.Werner@des.nh.gov, c=US Date: 2019.05.29 13:39:48 -04'00'

Certified Waste-Derived Product No. 9

Common Name: Alternate Daily Cover

Trade Name: Propat®

General Use / Purpose: Alternate daily cover at authorized double-lined landfills

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SECTION III: TERMS AND CONDITIONS

General Conditions

- (1) Subject to the terms and conditions of this certification, Propat® shall be deemed certified for distribution and use in the State of New Hampshire as alternate daily cover at authorized double-lined landfills in accordance with RSA 149-M and the New Hampshire Solid Waste Rules, Env-Sw 100 et seq., as each may be amended from time to time.
- (2) Propat®, when it is actively managed and used in accordance with the conditions of this certification, RSA 149-M, and the Rules, as each may be amended from time to time, shall be deemed not a solid waste.
- (3) Propat® and the waste used to produce Propat® shall not be nor ever have been a hazardous waste pursuant to RSA 147-A, and the New Hampshire Hazardous Waste Rules, Env-Hw 100 et seq., as each may be amended from time to time.
- (4) This certification shall not constitute an endorsement by NHDES of Propat®.
- (5) This certification shall not mean that Propat® is benign to the environment, public health and safety or that Propat® will perform according to consumer expectations or manufacturer or distributor representations.
- (6) This certification shall not exempt any person from the provisions of RSA 149-M and the Rules, as each may be amended from time to time, when Propat® resumes the status of a solid waste, including when it ceases being actively managed or is otherwise abandoned or discarded.
- (7) Production, distribution, use and disposal of Propat® is subject to the general requirements and limitations in Env-Sw 1502.02 and Env-Sw 1502.04, as each may be amended from time to time.
- (8) Prolerized New England Co., LLC shall provide information to demonstrate compliance with the terms and conditions of this certification when requested by NHDES.
- (9) This approval supersedes the prior certified waste-derived product approval of Propat®, dated July 2, 1999.

Product Specifications

- (10) Propat® shall be the material produced in accordance with U.S. Patent No. 5,468,291, dated November 21, 1995, except:
 - (a) That it shall not contain more than 5% by weight particles greater than four (4) inches in size; and
 - (b) Shredder residue used to make the product shall pass through a grate with openings not larger than 6-inches by 9-inches.
- (11) Propat® and the waste used to produce Propat® shall not contain wastes or materials prohibited from

Certified Waste-Derived Product No. 9

Common Name: Alternate Daily Cover

Trade Name: Propat®

General Use / Purpose: Alternate daily cover at authorized double-lined landfills

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landfilling in New Hampshire pursuant to RSA 149-M and the Rules, as each may be amended from time to time.

Production

(12) Propat® shall be produced as specified in Condition (10) at the Prolerized New England Co., LLC facility in Everett, Massachusetts using shredder residue generated by the same facility.

Distribution

(13) Propat® shall be distributed by Prolerized New England Co., LLC.

Product Use

- (14) Propat® is approved for use as alternate daily cover at authorized double-lined landfills in accordance with the receiving facility's permit.
- (15) All stormwater that contacts Propat® shall be managed as leachate.



APPLICATION REVIEW SUMMARY

New Hampshire Department of Environmental Services Waste Management Division, Solid Waste Management P.O. Box 95, 29 Hazen Drive Concord, NH 03302-0095

Phone: 603-271-2925 Fax: 603-271-2456

Applicant	Prolerized New England Co., LLC	Reviewer	Jaime M. Colby, P.E.	
Location	Statewide	Review Date	Completed May 29, 2019	
Permit No.	None			
Application	To Certify a Waste-Derived Product for Distribution	Activity No.	2019-36965	Page 1 of 17
	& Use: Propat® as ADC at Lined Landfills			

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	Application Review Summary			
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Location	Statewide	Review Date	Completed May 29, 2019	
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Application	To Certify a Waste-Derived Product for Distribution	Activity No.	2019-36965	Page 2 of 17
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PROJECT DESCRIPTION

The applicant, Prolerized New England Co., LLC (Prolerized) seeks certification of a waste-derived product known as Propat® for use as alternate daily cover (ADC) at lined landfills. Propat® is a proprietary product made of shredder residue (SR) and a cementitious material, typically Portland cement, cementitious kiln dust, or lime, using a patented process. NHDES previously approved, Propat® for use as Alternative Daily Cover at RCRA Subtitle D Lined Landfills under Certified Waste Derived Product (CWDP) No. 9, dated July 2, 1999. In 2018, Prolerized requested modifications to CWDP No. 9 and NHDES informed Prolerized that the New Hampshire Solid Waste Rules (the Rules, Env-Sw 100 et seq.), do not contain provisions for modifying the certification of waste-derived products. On January 23, 2019, Prolerized submitted an application for a new CWDP to replace the CWDP issued July 2, 1999.

NHDES reviewed the application to determine whether the waste-derived product meets all applicable criteria for certification as specified in the Rules in effect on the date of the final decision on the application. The results of the review are summarized herein, on a rule by rule basis. The reader can obtain a copy of the cited rules from the NH Office of Legislative Services (see http://gencourt.state.nh.us/rules/default.htm).

NHDES is approving the application to certify the waste-derived product Propat® for use as alternate daily cover at authorized double-lined landfills, with conditions. This certification supersedes the previously issued Certified Waste-Derived Product No. 9 issued on July 2, 1999 and described as auto shredder residue stabilized with kiln dust. This approval is issued as Certified Waste-Derived Product No. 9, Propat® for use as Alternate Daily Cover.

Submittals

- Tetra Tech. (January 21, 2019). Application to Certify a Waste-Derived Product for Distribution & Use: Propat as ADC for Landfills. Received January 23, 2019. Assigned WMD Log No. 2019-36965-01.
- Tetra Tech. (February 14, 2019). Email providing MADEP Beneficial Use Determination (BWP SW 40) and U.S. Patent No. 5,468,291 for Metal Shredder Residue-Based Landfill Cover. Received February 14, 2019. Assigned WMD Log. No. 2019-36965-02.

NHDES deemed the application complete as of February 14, 2019, in accordance with Env-Sw 1507.02, *Application Completeness Determination*.

TECHNICAL REVIEW NOTES

NHDES reviewed the information provided in the application to determine if the proposed waste-derived product met the applicable requirements of the Rules for certification. The notes provided in this section document the review, on a rule-by-rule basis.

General note regarding product specifications: NHDES reviewed the application to determine whether the proposed product is <u>likely</u> to satisfy the requirements for certification of a waste-derived product pursuant to the Rules. Actual compliance with the certification requirements is determined on an ongoing basis. Even if NHDES has determined that the waste-derived product is <u>likely</u> to satisfy the certification and rule requirements, additional or different measures may be necessary to maintain compliance depending on actual conditions.

To be certified as a waste-derived product pursuant to Env-Sw 1500, the waste-derived product must not be nor ever have been a hazardous waste. See Attachment A for a review of the information provided relative to a hazardous waste determination made in accordance with the New Hampshire Hazardous Waste Rules (Env-Hw 100 et seq.) and RSA 147-A, the Hazardous Waste Management Act. The remainder of this review presumes that Propat® and the waste from

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which Propat® is derived is not nor has ever been a hazardous waste.

Env-Sw 800 LANDFILL REQUIREMENTS

Env-Sw 801 APPLICABILITY

• 801.01 <u>Applicability</u> – Not Applicable – However, Propat® is proposed to be used by landfill permittees to comply with the daily cover requirements of Env-Sw 800. As part of its review to determine whether to approve certification of Propat®, NHDES evaluated whether Propat® could be used by landfill permittees and operators of landfills as ADC.

Env-Sw 802 PERMITTING REQUIREMENTS – No daily cover requirements

Env-Sw 803 FEDERAL REQUIREMENTS FOR MSW LANDFILLS – No daily cover requirements beyond those in Env-Sw 800.

Env-Sw 804 SITING REQUIREMENTS – No daily cover requirements

Env-Sw 805 DESIGN AND CONSTRUCTION REQUIREMENTS – No daily cover requirements

Env-Sw 806 OPERATING REQUIREMENTS

Env-Sw 806.01 Applicability – No daily cover requirements

Env-Sw 806.02 Waste Placement – No daily cover requirements

Env-Sw 806.03 Landfill Cover During Operations

- 806.03(a) Applicable Env-Sw 806.03(a) requires landfill operators to apply approved cover material in a manner and at a frequency required to achieve the performance objectives in Env-Sw 806.03(a)(1)-(7). For purposes of this application review, NHDES assessed whether Propat® could successfully be used by landfill operators to achieve the performance objectives in Env-Sw 806.03(a)(1)-(7). NHDES notes that the type of cover (e.g., soil, tarp, Propat®) is only one aspect of the measures used by landfill operators to achieve the performance objectives herein. Approval of Propat® does not imply that, solely because an operator used Propat, that landfill operators are complying with Env-Sw 806.03(a) for daily cover.
 - (1) The application states Propat® does not contain undesirable odors and effectively mitigates odors.
 Based on the characteristics of Propat® and experience with a similar product, NHDES concurs that Propat® can likely be used to meet this requirement. Satisfies requirement.
 - (2) The application states Propat® is more effective at controlling birds and rodents compared to soil. Based on the characteristics of Propat® and experience with a similar product, NHDES concurs that Propat® can likely be used to meet this requirement. Satisfies requirement.
 - (3) The type of daily cover used is not pertinent to the requirement in Env-Sw 806.03(a)(3) to control drainage in accordance with Env-Sw 805.06, Env-Sw 805.09, Env-Sw 806.05, and Env-Sw 806.06. No assessment required.
 - (4) The application states Propat® controls windblown litter. The application does not explicitly address unsightly conditions. Based on the characteristics of Propat® and experience with a similar product, NHDES determined that Propat can likely be used to control unsightly conditions and windblown litter. Satisfies requirement.
 - (5) The application states Propat® is not flammable so it reduces the potential for landfill fires. Further, U.S. Patent No. 5,468,291 states that the product made using the patented process (i.e., Propat®), when subjected to an ignition source, showed no indication of combustion. Based on the characteristics of Propat® and experience with a similar product, NHDES determined that Propat can likely be used to assist in reducing the potential for fires. Satisfies requirement.
 - o (6) The application does not address how Propat® provides stability. Based on the characteristics of Propat® and experience with a similar product, NHDES anticipates that Propat can be used to provide stable working surfaces and otherwise provide stability to the waste mass. Satisfies requirement.
 - o (7) Not a requirement related to use of daily cover. Daily cover is not used to develop final grades. No assessment required.

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- 806.03(b)(1) Applicable See review of Env-Sw 806.03(a) above. Based on the characteristics of Propat® and experience with a similar product, NHDES determined that Propat® can likely be used to meet the performance standards specified in Rule. Satisfies requirement.
- 806.03(b)(2)a. Applicable The application states Propat® does not require specialized equipment and is easy to use. Based on the characteristics of Propat® and experience with a similar product, NHDES determined that Propat® will likely not cause equipment or operational problems. Satisfies requirement.
- 806.03(b)(2)b. Applicable The application does not address whether Propat® contributes to the deterioration
 of leachate quality at lined landfills. Based on the characteristics of Propat® and experience with a similar
 product, NHDES determined that Propat® will likely not contribute to deterioration of leachate quality at lined
 landfills. Satisfies requirement.
- 806.03(b)(2)c. Not applicable Propat® is not proposed or approved for use at unlined landfills.
- 806.03(b)(2)d. Applicable The application states Propat® does not adversely impact the environment, public health, or safety; however, the application does not address whether Propat® poses a hazard to human health through skin contact or respiration. Based on review of a 1998 material safety data sheet (MSDS) for Propat®, the product has similar potential to soil for irritation of skin and eyes and as a respiratory hazard. The daily cover for which Propat® will be used is applied at active landfills by staff trained to work around solid waste. As such, NHDES has determined that Propat® used as alternate daily cover, with routine health and safety precautions used by landfill operating staff, will not pose a potential hazard to human health through skin contact and respiration. Satisfies requirement.
- 806.03(b)(3)a. Applicable See Attachment A.
- 806.03(b)(3)b. Applicable The application does not address whether the material is physically and chemically consistent. Based on a review of U.S. Patent 5,468,291, the product should have the following physical composition: 66-82% shredder residue; 15-22% moisture content; 3-12% inorganic cementitious particles; and, as needed, a binding agent (i.e., trisodium phosphates or polysilicates). Further, based on a review of the Massachusetts Department of Environmental Protection's (MassDEP's) Beneficial Use Determination issued to Prolerized for Propat® and MassDEP's Conditional Exclusion Decision for Auto Shredder Residue, both issued October 27, 2015, Prolerized controls the shredder feedstock to produce a physically and chemically consistent product. Based on the production process and experience with a similarly produced product, NHDES anticipates that Propat® will likely be physically and chemically consistent enough to be used as daily cover. Satisfies requirement.

To ensure compliance with this rule, the certification states:

- Propat® must be produced in accordance with U.S. Patent No. 5,468,291; and
- Propat® may only be produced by Prolerized at its facility located in Everett, MA.
- 806.03(b)(3)c. Applicable The application states Propat® has an approximately 20% moisture content, and
 that the facility has procedures in place to avoid acceptance of liquid materials such as automotive fluid. Based
 on the characteristics of Propat® and experience with a similar product, NHDES anticipates that Propat® will not
 contain free liquids. Liquid wastes are banned from landfilling in NH. With condition, satisfies requirement.

NHDES is not requiring routine testing for the presence of free liquids. If required to assess compliance, testing for the presence of free liquids must be conducted in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods Compendium," EPA Pub No. SW-846, which includes Test Method 9095B, Paint Filter Liquids Test.

To ensure compliance with this rule, the certification requires that Propat® and the waste used to make Propat®

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not contain wastes or materials prohibited from landfilling in New Hampshire.

Env-Sw 806.04 through Env-Sw 806.12 – No daily cover requirements

Env-Sw 807 CLOSURE REQUIREMENTS – No daily cover requirements

Env-Sw 808 LANDFILL RECLAMATION – No daily cover requirements

Env-Sw 809 RESERVED

Env-Sw 810 PERMIT-EXEMPT LANDFILLS – No daily cover requirements

Env-Sw 1500 CERTIFICATION OF WASTE-DERIVED PRODUCTS

Env-Sw 1501 PURPOSE AND APPLICABILITY

Env-Sw 1501.01 Purpose – Statement. No evaluation required.

Env-Sw 1501.02 Applicability – These rules are applicable.

Env-Sw 1502 CERTIFICATION REQUIREMENTS

Env-Sw 1502.01 <u>Certification Required</u> – Applicable – The product is waste-derived; therefore, it must be certified for distribution and use in accordance with this chapter and, if certified, used in accordance with the certification. Applicant has applied for certification of the waste-derived product. Satisfies requirement.

Env-Sw 1502.02 <u>Status of Certified Waste-Derived Products</u> – Applicable – These rules are applicable to a product that has been certified. No evaluation required.

To ensure compliance with this rule following certification of the product, Condition (7) of the certification states that production, distribution, use and disposal of Propat® is subject to the general requirements and limitations in Env-Sw 1502.02 and Env-Sw 1502.04, as each may be amended from time to time.

Env-Sw 1502.03 General Provisions for Obtaining Certification

- 1502.03(a)(1) Not applicable The product is not certified by rule Env-Sw 1503.
- 1502.03(a)(2) Applicable See review of Env-Sw 1504 and Env-Sw 1505 herein.
- 1502.03(b) Not applicable Instructions for NHDES. No evaluation required.
- 1502.03(c) Not applicable Product is proprietary.
- 1502.03(d) Applicable Application was filed by Prolerized, which has proprietary control of the product. Satisfies requirement.

Env-Sw 1502.04 <u>General Requirements and Limitations</u> – Applicable – These rules are applicable to a product that has been certified. No evaluation required.

To ensure compliance with this rule following certification of the product, Condition (7) of the certification states that production, distribution, use and disposal of Propat® is subject to the general requirements and limitations in Env-Sw 1502.02 and Env-Sw 1502.04, as each may be amended from time to time.

Env-Sw 1503 WASTE-DERIVED PRODUCTS CERTIFIED BY RULE - Not Applicable

Env-Sw 1504 CRITERIA FOR CERTIFICATION

Env-Sw 1504.01 Purpose – Statement. No evaluation required.

Env-Sw 1504.02 Applicability – Applicable – These rules are applicable to certifying a waste-derived product.

Env-Sw 1504.03 <u>Certification Criteria</u> – Applicable – See review of Env-Sw 1504.04 through Env-Sw 1504.06 in Attachment B.

Env-Sw 1504.04 Need – Applicable – See Attachment B.

Env-Sw 1504.05 Product Quality and Quality Control – Applicable – See Attachment B.

Env-Sw 1504.06 Impact on Society – Applicable – See Attachment B.

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Env-Sw 1505 APPLICATION REQUIREMENTS

Env-Sw 1505.01 Applicability

- 1505.01(a) Applicable These rules apply to Prolerized. No evaluation required.
- 1505.01(b) Not applicable Propat® is certified by NHDES as CWDP No. 9, dated July 2, 1999; however, the applicant is effectively requesting that the existing certification be superceded by re-applying for certification of the waste-derived product evaluated herein. The product, as described in the application under review herein, is not certified due to physical and chemical differences between the original certification, dated July 2, 1999, and the request for certification under review herein.
- 1505.01(c) Applicable These rules apply to Prolerized. No evaluation required.

Env-Sw 1505.02 <u>Application Content and Format</u> – Applicable – See review of Env-Sw 1505.03 through Env-Sw 1505.09 herein.

Env-Sw 1505.03 Applicant Identification

- 1505.03(a) Not applicable
- 1505.03(b)(1) Applicable The application includes the applicant's state of incorporation, and the principle place of business; however, the names and address of its directors, officers, and shareholders were not provided. Prolerized is registered with the NH Secretary of State, is listed as in Good Standing (as of the date of this review), and has a local registered agent. Because a background investigation is not required, NHDES takes no exception to the omission. Satisfies requirement.
- 1505.03(b)(2) Applicable Satisfies requirement.
- 1505.03(c)(1) Applicable Satisfies requirement.
- 1505.03(c)(2) Applicable Satisfies requirement.
- 1505.03(c)(3) Applicable Satisfies requirement.
- 1505.03(c)(4) Not applicable Prolerized has stated it will produce the shredder residue required to make the product.
- 1505.03(c)(5) Not applicable Prolerized will distribute the product to users.

Env-Sw 1505.04 Production Identification and General Description

- 1505.04(a) Applicable The product common name is "alternate daily cover" for use at lined landfills. The trade name is Propat[®]. Satisfies requirement.
- 1505.04(b) Applicable The product will be used for alternate daily cover material at lined landfills, and is a soil-like material. Satisfies requirement.
- 1505.04(c) Applicable A comparable existing non-waste derived product is soil. Satisfies requirement.
- 1505.04(d) Applicable Satisfies requirement.

Env-Sw 1505.05 Manufacturer Identification

- 1505.05(a) Applicable The product is proprietary. Satisfies requirement.
- 1505.05(b) Applicable The applicant is the propriety manufacturer of the product. See also review of Env-Sw 1505.03(b) herein. Satisfies requirement.
- 1505.05(c) Not applicable

Env-Sw 1505.06 Production

- 1505.06(a)(1) Applicable See Application Form, Section 3. Satisfies requirement.
- 1505.06(a)(2) Applicable See Application Form, Section 3. Satisfies requirement.
- 1505.06(a)(3)a. Applicable See Application Form, Section 5. Satisfies requirement.
- 1505.06(a)(3)b. Applicable No material safety data sheet (MSDS) provided; a MSDS, dated 1998, was provided with the original application and is publicly available in the Propat® certification file. Satisfies requirement.
- 1505.06(a)(3)c. Not applicable NHDES did not request samples of the waste.

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Permit No.	None				
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- 1505.06(a)(4)a. Applicable See Application Form, Section 5. Satisfies requirement.
- 1505.06(a)(4)b. Applicable See Application Form, Section 5. Satisfies requirement.
- 1505.06(a)(5) Applicable See Application Form, Section 5. Satisfies requirement.
- 1505.06(b)(1) Applicable See Application Form, Section 6. Satisfies requirement.
- 1505.06(b)(2) Applicable See Application Form, Section 6 and U.S. Patent No. 5,468,291, dated Nov. 21, 1995 (WMD Log No. 2019-36965-02). Satisfies requirement.
- 1505.06(b)(3) Applicable See U.S. Patent No. 5,468,291, dated Nov. 21, 1995 (WMD Log No. 2019-36965-02). Satisfies requirement.
- 1505.06(b)(4) Applicable Shredder Residue (SR) Sampling and Analysis Protocols, dated September 8, 2015 outlines the QA/QC procedures. See Attachment B for evaluation of QA/QC procedures. Satisfies requirement.

Env-Sw 1505.07 Use, Distribution and Markets

- 1505.07(a) Applicable See Application Form, Section 7. The product is proposed for use as alternate daily cover at lined landfills. Satisfies requirement.
- 1505.07(b) Applicable See Application Form, Section 7. Satisfies requirement.
- 1505.07(c) Applicable The applicant states that no restrictions are necessary, since approval is being requested to use Propat® only as landfill daily cover. Satisfies application content
- 1505.07(d) Applicable See Application Form, Section 7. Satisfies requirement.
- 1505.07(e) Applicable No dollar amount provided. The applicant described, in Section 7 of the Application Form, that there is relative market value for the applicant, who would otherwise be required to dispose of the waste at full price, and landfill operators, who can charge a fee for accepting Propat® instead of buying soil for daily cover. Satisfies requirement.
- 1505.07(f) Applicable See Application Form, Section 7. Satisfies requirement.

Env-Sw 1505.08 <u>Demonstration of Criteria</u> – Applicable – See addendum to Application Form, Section 8. Satisfies requirement.

Env-Sw 1505.09 <u>Signature and Certification of Application Information</u> – Applicable – Application was signed and certified by Michael Henderson, President, Prolerized New England Company, LLC. Satisfies requirement.

Env-Sw 1506 APPLICATION FILING

Env-Sw 1506.01 Application Filing – Applicable – Satisfies requirements.

Env-Sw 1507 APPLICATION REVIEW

Env-Sw 1507.01 Application Receipt

- 1507.01(a) Applicable Satisfies requirement.
- 1507.01(b) Not applicable
- 1507.01(c) Not Applicable

Env-Sw 1507.02 Application Completeness Determination – Applicable – Satisfies requirement.

Env-Sw 1507.03 Incomplete Applications – Not applicable

Env-Sw 1507.04 Complete Applications – Applicable – Instructions for NHDES. See review of Env-Sw 1504 herein.

APPLICATION DECISION

Env-Sw 1500 CERTIFICATION OF WASTE-DERIVED PRODUCTS

Env-Sw 1507 APPLICATION REVIEW

Env-Sw 1507.05 Application Decision

• 1507.05(a) – Applicable – As described in Attachment B, NHDES has determined that the criteria for certification in Env-Sw 1504 are met, subject to terms and conditions in the approval; therefore, the requested certification is approved and, for administrative reasons, re-issued as Certified Waste-Derived Product No. 9, Propat® for use as Alternate Daily Cover.

	Application Review Summary				
Facility	Facility Prolerized New England Co., LLC Reviewer Jaime M. Colby, P.E.				
Location	Statewide	Review Date	Completed May 29, 2019		
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- 1507.05(b) Not applicable
- 1507.05(c) Not Applicable

OTHER LOCAL, STATE, AND FEDERAL REQUIREMENTS

The review and conclusions presented in this application review summary pertain solely to solid waste requirements of RSA 149-M and Env-Sw 100 et seq. As noted in Env-Sw 1502.02(d) and (e), an approval granted relative to these solid waste requirements shall not affect any person's obligation to obtain all requisite federal, state or local permits, licenses or approvals, or to comply with other applicable federal, state, district or local permits, ordinances, laws or approvals or conditions pertaining to the approved activity. Also, pursuant to Env-Sw 101.02(d), if a conflict arises between the rules in subtitle Env-Sw and any federal or state statute, rule, or regulation, the more stringent requirement(s) shall apply.

	Application Review Summary			
Facility	Facility Prolerized New England Co., LLC Reviewer Jaime M. Colby, P.E.			
Location	Statewide	Review Date	Completed May 29, 2019	
Permit No.	None			
Application	To Certify a Waste-Derived Product for Distribution & Use: Propat® as ADC at Lined Landfills	Activity No.	2019-36965	Page 9 of 17

ATTACHMENT A – Review Relative to a New Hampshire Hazardous Waste Determination

Application to Certify a Waste-Derived Product for Distribution and Use Propat® as Alternate Daily Cover at Lined Landfills Prolerized New England Company, LLC May 29, 2019

<u>Summary:</u> To meet the requirements for certification in New Hampshire, the product must be a solid waste, and must not be a hazardous waste. Therefore, the product (Propat®) and the waste used to make the product (shredder residue) must not be nor ever have been a hazardous waste pursuant to RSA 147-A, and the New Hampshire Hazardous Waste Rules, Env-Hw 100 et seq.

The applicant states in the application that quality assurance/quality control (QA/QC) procedures are in place to remove hazardous materials, such as automotive fluids, batteries, mercury-containing devices, and refrigerants from the source material prior to the shredding process. The application also includes a *Shredder Residue (SR) Sampling and Analysis Protocols* plan that describes sampling QA/QC procedures for the product. The protocol states that samples shall be collected, prepared, and analyzed in accordance with 40 CFR 761, Subpart R, and SW 846, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. The protocol outlines a multi-level sampling method to obtain composite samples for bi-monthly (once every two months) and once annual analysis. The plan is prepared to meet Massachusetts requirements, and requires that samples be analyzed bi-monthly for certain metals, polychlorinated biphenyls, and total petroleum hydrocarbons; and annually for certain metals.

NHDES' Hazardous Waste Management Bureau (HWMB) reviewed the proposed sampling and analysis protocols and provides the following guidance for a New Hampshire hazardous waste determination on the shredder residue, made prior to the addition of cementitious particles. Note that this information is for guidance only, and a hazardous waste determination must be made in accordance with all applicable rules and regulations.

Evaluation of Regulatory Criteria: In the certification, Condition (3) requires Propat® and the waste used to produce Propat® to not be, nor ever have been, a hazardous waste. As such, both the shedder residue (SR) and Propat® must undergo a hazardous waste determination in accordance with the New Hampshire Hazardous Waste Rules, Env-Hw 100 et seq. Part Env-Hw 401.04 states that a hazardous waste determination "... shall conform with the procedures specified in 40 CFR 261 Appendix I, EPA publication 'SW-846,'..." An important part of SW-846 is the sampling procedure for a waste that requires multiple samples. When sampling wastes that exhibit a physical and chemical diversity, such as SR, it is recommended that more than one sample be collected and analyzed. A technically sound sampling and analysis plan is necessary to complete an appropriate hazardous waste determination. The sampling plan ensures that a representative sample of the whole is collected. The analysis plan ensures that the constituents of concern are appropriately analyzed, and that a statistical analysis is applied to account for uncertainty in the analytical data. When interpreting the analytical results to determine if a waste is hazardous, the generator shall use the methods described in Chapter 9 of SW-846. This includes comparing the 80% upper confidence interval (UCI) value to the applicable hazardous waste regulatory thresholds. When determining if the SR (for this example, not the Propat®) is a hazardous waste, the 80% UCI shall be used. The average of the analytical data as identified in the Massachusetts Conditional Exclusion Decision for Auto Shredder Residue issued on October 27, 2015, hereinafter referred to as the 2015 CED, cannot be used to make this determination for waste destined for New Hampshire.

	Application Review Summary			
Facility	Facility Prolerized New England Co., LLC Reviewer Jaime M. Colby, P.E.			
Location	Statewide	Review Date	Completed May 29, 2019	
Permit No.	None			
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NHDES reviewed the 2015 CED and agrees with the contemporaneous sampling protocols for the SR in Section IV - Sampling Protocols and Frequency. However, to determine if the material being used to make the Propat® is a hazardous waste, samples shall be taken when a non-exempt hazardous waste is generated. Based on a discussion with the applicant on May 9, 2019, this occurs after the non-ferrous metal is removed from the shredded material but before the cementitious particles are added – this is when the shredder residue used as feedstock in Propat® is generated. The eight bi-monthly samples (Level III) must be analyzed for total metals for all eight RCRA metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag). If any metal in any sample (mg/kg) is equal to or greater than 20 times the toxicity characteristic identified in Env-Hw 403.06, Table 4.9 – Maximum Concentration of Contaminants for the Toxicity Characteristic (in mg/l), then a TCLP analysis is required for that specific metal in all 8 samples. The eight bi-monthly samples (Level III) shall constitute one sampling event and a new hazardous waste determination upon completion. The TCLP analytical results shall be subject to the 80% UCI statistical analysis in Chapter 9 of SW-846 and compared with the TCLP regulatory threshold to determine if the SR contains any TCLP metal at a hazardous level.

	Application Review Summary				
Facility	FacilityProlerized New England Co., LLCReviewerJaime M. Colby, P.E.				
Location	Statewide	Review Date	Completed May 29, 2019		
Permit No.	None				
Application	To Certify a Waste-Derived Product for Distribution	Activity No.	2019-36965	Page 11 of 17	
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ATTACHMENT B - Evaluation of Certification Criteria

Application to Certify a Waste-Derived Product for Distribution and Use Propat® as Alternate Daily Cover at Lined Landfills Prolerized New England Company, LLC May 29, 2019

<u>Summary</u>: The applicant, Prolerized New England Co., LLC (Prolerized), seeks certification of a waste-derived product known as Propat® for use as alternate daily cover (ADC) at lined landfills. Propat® is a proprietary product made of shredder residue (SR) and a cementitious material, typically Portland cement, cementitious kiln dust, or lime, using a patented process.

Evaluation of Certification Criteria: The New Hampshire Solid Waste Rules, Env-Sw 100 et seq., specifically Env-Sw 1507.05, *Application Decisions*, states that "[i]f the criteria for certification in Env-Sw 1504 are met, the department **shall** certify the waste-derived product for distribution and use." The certification criteria are specified in Env-Sw 1504.04 through Env-Sw 1504.06. NHDES' assessment and determination of the certification criteria is described below. The Rule criteria are presented in "underline." Information provided by the applicant and pertaining to NHDES' related assessments is presented in regular type. NHDES' determination is presented in **bold italics**.

<u>Env-Sw 1504.04 Need. "The applicant shall demonstrate a need for the waste derived product based on the following criteria:"</u>

- (a) "The waste-derived product shall either:
 - (1) <u>Be comparable in form and function to an existing product in the market place which is not derived from</u> waste, and shall perform as effectively or more effectively than the existing product; or"

The applicant asserts in Section 8 of the Application Form that Propat® is comparable in form and function to soil, which is often used for landfill daily cover, and that it performs at least as effectively as soil.

In Section 5 of the Application Form, the applicant further addresses performance of Propat® as a daily cover material, noting that Propat®:

- Does not require specialized equipment other than what is already available at a landfill;
- Is not subject to freezing and can be applied during precipitation events and freezing conditions;
- Is effective at controlling birds, rodents, windblown litter, and odors;
- Is more compressible than soil, so consumes less volume when placed with the same loose lift thickness as soil:
- Is not flammable; and
- Does not have characteristics which have potential to create a nuisance condition or adversely impact the environment, public health or safety.

U.S. Patent No. 5,468,291 also addresses performance of the material made using the patented process, specifically, the patent describes the behavior of the material relative to fire control, chemical and leaching characteristics, and performance during field testing. The patent discussion generally concluded that the material performed similar to natural soils.

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Facility	Prolerized New England Co., LLC	Reviewer	Jaime M. Colby, P.E.	
Location	Statewide	Review Date	Completed May 29, 2019	
Permit No.	None			
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	& Use: Propat® as ADC at Lined Landfills			

NHDES Assessment and Determination

Based on the characteristics of Propat® and experience with a similar material, NHDES determined that Propat® will likely perform as effectively as existing products used for daily cover. This criterion is met.

(2) <u>"Satisfy an identifiable and unfulfilled need in society without violating the universal environmental</u> performance standards in Env-Sw 1002;"

NHDES Assessment and Determination

Env-Sw 1504.04(a) requires demonstration of need under (1) or (2). NHDES determined that the applicant demonstrated the need under (1). Assessment of (2) is not required; therefore, NHDES did not assess this criterion and makes no determination.

(b) "There shall be an identifiable user or buyer for the waste-derived product; and"

The applicant states in the application that end users for Propat® include Waste Management (Turnkey Landfill) in Rochester and Mt. Carberry Landfill in Berlin.

NHDES Assessment and Determination

During review of this application, NHDES received inquiries from identifiable users of the product about the status of this application, and concurs with the applicant's assertion that a market exists for the product. This criterion is met.

• (c) <u>"Waste-derived products used for agronomic purposes shall provide an identifiable benefit(s) to the sites to which it is land applied."</u>

The applicant states in the application that Propat® will not be used for agronomic purposes.

NHDES Assessment and Determination

The product was proposed and NHDES has approved use solely as alternate daily cover at double-lined landfills designed in accordance with Env-Sw 805.05. This is not an agronomic use. Because the product is not proposed or approved for agronomic purposes, this criterion is not applicable and NHDES makes no determination.

To ensure compliance with this rule, the certification approves Propat® for use as alternate daily cover at authorized double-lined landfills in accordance with the receiving facility's permit.

<u>Env-Sw 1504.05</u> Product Quality and Quality Control. "The applicant shall demonstrate that the production process meets the following requirements:

- (a) Production of the waste-derived product shall not:
 - (1) Cause a violation of any requirement in Env-Sw 1000; or"

The applicant asserts in Section 8 of the Application Form that the production of Propat® does not violate the requirements in Env-Sw 1000.

NHDES Assessment and Determination

Propat® is neither currently nor proposed to be produced in New Hampshire. Based upon Prolerized's description of its out-of-state production facility and NHDES' understanding of the production process,

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Location	Statewide	Review Date	Completed May 29, 2019	
Permit No.	None			
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NHDES has determined that production of Propat® can likely meet this requirement. This criterion is met.

(2) "Pose a greater risk to the environment, public health and safety than does the production of an existing comparable non-waste-derived product or, if no comparable non-waste-derived product exists, by directly disposing of the waste in accordance with the solid waste rules;"

The applicant asserts in Section 8 of the Application Form that Propat® does not cause a greater risk to the environment, public health or safety compared to the production of non-waste-derived materials used for landfill daily cover.

NHDES Assessment and Determination

Propat® is neither currently nor proposed to be produced in New Hampshire. Based upon Prolerized's description of its out-of-state production facility and NHDES' understanding of the production process, NHDES has determined that the production of Propat® can likely meet this requirement. This criterion is met.

• (b) "The physical and analytical characteristics of the waste used to produce the product shall be defined in a written specification;"

The applicant provided the physical and analytical characteristics of the solid waste used. The shredder residue is created by shredding end-of-life automobiles and other light iron, including white goods. After shredding and processing to recover ferrous and non-ferrous metals, the waste generally consists of rubber, glass, plastic, fabric fibers, foam, and about 5% metal. The applicant states that potential contaminants such as automotive fluids, batteries, mercury-containing switches, refrigerants, and PCB-containing items are not accepted; the facility has multiple notification procedures in place for suppliers of shredder feedstock; and facility personnel inspect incoming materials to ensure they are suitable for shredder feedstock. Due to its physical characteristics, shredder feedstock cannot be tested for analytical characteristics prior to shredding.

NHDES Assessment and Determination

The physical characteristics of shredder feedstock were described in the application. The physical characteristics of shredder residue were described in the application. Due to the nature of the waste used to make the product, a traditional written specification is not practical and not necessary. However, to fulfill the QA/QC requirements, authorized and prohibited wastes for shredder feedstock; and inspection, acceptance and rejection procedures for shredder feedstock are necessary to reduce the potential for including wastes in the shredder feedstock that may result in a waste-derived product that does not meet the requirements of the certification. NHDES reviewed the MassDEP Conditional Exclusion Determination, dated October 27, 2015, and the Beneficial Use Determination (BUD) relative to Propat® and determined that the procedures in place at Prolerized's Everett, MA facility fulfill the role of a written specification.

To ensure shredder residue precludes unacceptable materials, the certification requires that Propat® be produced at the Prolerized facility in Everett, MA, which has protocols under its Massachusetts approvals for identifying authorized and prohibited materials for shredder feedstock; and implementing inspection, acceptance and rejection procedures for shredder feedstock.

NHDES concurs that <u>shredder feedstock</u> cannot be tested using traditional analytical laboratory methods prior to shredding; therefore, a written analytical characteristic specification is not appropriate for this waste. However,

Application Review Summary				
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Location	Statewide	Review Date	Completed May 29, 2019	
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NHDES notes that <u>shredder residue</u> can be sampled using traditional collection techniques and tested using traditional analytical laboratory methods for both physical and chemical characteristics as described in the "Shredder Residue (SR) Sampling and Analysis Protocols" and EPA Publication No. SW-846, Testing Methods for Evaluating Solid Wastes. However, because there are no physical or analytical requirements for shredder residue, except that the shredder residue and Propat® be produced using the patented process, NHDES has not added specific sample collection and analytical testing requirements for shredder residue to the certification.

NHDES notes that certain materials and wastes are banned from landfilling in New Hampshire pursuant to RSA 149-M and Env-Sw 806.12.

To ensure shredder residue does not contain materials and wastes banned from landfilling in New Hampshire, NHDES has added a provision to the certification that Propat® and the waste used to product Propat® not include wastes or materials prohibited from landfilling in New Hampshire pursuant to RSA 149-M and the Rules, as each may be amended from time to time.

NHDES notes that landfill permittees may have analytical testing and reporting requirements beyond those identified in the certification to ensure that Propat® meets the landfill's acceptance criteria for alternate daily cover. NHDES did not attempt to identify such analytical requirements and, at this time, leaves these additional analytical requirements to the discretion of landfill permittees.

With conditions, this criterion is met.

• (c) <u>"The physical and analytical characteristics of the waste-derived product shall be defined in a written specification; and"</u>

The applicant states that the waste-derived product Propat® is a soil-like material, with a maximum particle size of 4 inches for 95% of the material by volume. Based on the application and U.S. Patent No. 5,468,291, the product consists of (by weight):

- 66 82% (typ. 70%) shredder residue, including rubber, glass, plastic, fabric, foam, and about 5% metals;
- 15 22% (typ. 20%) moisture;
- 3 12% (typ. 10%) cementitious material, typically Portland cement, cement kiln dust, or lime; and
- As needed, a binding agent (i.e., trisodium phosphates, polysilicates).

Prolerized provided additional information regarding maximum particle size, stating in a May 15, 2019 email that the size of the final product, Propat®, is the result of the screen size used in the initial shredding process (shown as a 6 inch by 9 inch grate in U.S. Patent No. 5,468,291) and that, while Prolerized currently uses a slightly smaller screen (5 inch by 7 inch), it proposes to use up to the screen size referenced in the Patent.

Further, the application identifies the analytical characteristics of Propat® consistent with those required for CWDP No. 9, dated July 2, 1999, except that 95% by weight of the particles not exceed 4-inches and that the maximum size grate shredder residue will pass through be 6-inches by 9-inches.

NHDES Assessment and Determination

The physical and analytical characteristics of Propat® were described in the application and U.S. Patent No. 5,468,291. Because Propat® is produced using a patented process, an independent written physical specification is not necessary; the product specification is described in U.S. Patent No. 5,468,291 with exception for maximum

Application Review Summary				
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Permit No.	None			
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particle size.

To ensure the product meets the physical characteristics identified in the application and for use as alternate daily cover, the certification requires that Propat® be produced using the patented process described in U.S. Patent No. 5,468,291, except that Propat® shall not contain more than 5% by weight particles greater than four (4) inches in size; and shredder residue used to make the product shall pass through a grate with opening not larger than 6-inches by 9-inches.

With regards to analytical characteristics, Propat® must be produced from a solid waste that is not banned from landfilling in New Hampshire. For example, Propat® cannot be a liquid waste (i.e., not contain free liquids, see Env-Sw 806.12), Propat® cannot contain polychlorinated biphenyls (PCBs) regulated under the Toxic Substances Recovery Act (TSCA), and Propat® cannot contain mercury-added products (see RSA 149-M:58,I). Further, the certification does not affect any person's obligation to obtain all requisite federal, state or local permits, licenses or approvals or to comply with all other applicable federal, state, district or local permits, ordinances, laws or approvals or conditions pertaining to production, distribution, use, and disposal of this certified waste-derived product. Therefore, specific analytical requirements are not necessary.

To ensure Propat® does not contain materials and wastes banned from landfilling in New Hampshire, NHDES has added a provision to the certification that Propat® and the waste used to produce Propat® not include wastes or materials prohibited from landfilling in New Hampshire pursuant to RSA 149-M and the Rules, as each may be amended from time to time.

Further, the authorization section of the certification includes language regarding obligations under federal, state, district, and local regulations.

Propat is derived from solid waste and contains contaminants (e.g, metals, petroleum hydrocarbons, etc.) that could be picked up and transported in stormwater. While the processing and addition of cementitious material may reduce the amount of contaminants that are in stormwater that has contacted Propat, NHDES has determined that it is appropriate to manage stormwater that contacts Propat® as if the product were a waste.

To ensure compliance with this determination, the certification includes a condition that stormwater that contacts Propat® while it is stored or used at a landfill must managed as leachate.

With conditions, this criterion is met.

• (d) "The production process shall include quality assurance/quality control procedures to assure the defined specifications shall be met through the production process."

The applicant states in the application that quality assurance/quality control (QA/QC) procedures are in place to remove regulated materials, such as PCB-containing items from the source material prior to the shredding process. Sampling will be done pursuant to MassDEP requirements.

NHDES Assessment and Determination

Based on a review of the information provided, Prolerized produces the product using the method described in U.S. Patent No. 5,468,291 and has acceptable QA/QC procedures in place at its facility in Everett, MA.

Application Review Summary				
Facility	Prolerized New England Co., LLC	Reviewer	Jaime M. Colby, P.E.	
Location	Statewide	Review Date	Completed May 29, 2019	
Permit No.	None			
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To ensure Propat® meets this requirement, the certification requires that Propat® be produced as specified in U.S. Patent No. 5,648,291, dated November 21, 1995, at the Prolerized New England Co., LLC facility in Everett, MA using shredder residue generated by the same facility.

With conditions, this criterion is met.

<u>Env-Sw 1504.06</u> <u>Impact on Society. "The applicant shall demonstrate that use of the waste-derived product in society shall have a minimum net impact based on the following requirements:</u>

- (a) Use of the waste-derived product as intended shall not:
 - (1) Cause a violation of any requirement of Env-Sw 1000; or"

The applicant states in the application that Propat® used as landfill daily cover will not violate Env-Sw 1000.

NHDES Assessment and Determination

Propat® is proposed for use at lined landfills, which are required to comply with the Rules, including Env-Sw 1000; therefore, NHDES has determined that Propat® used at an authorized facility will not violate Env-Sw 1000.

To ensure the use of Propat® meets this requirement, the certification approves Propat® for use as alternate daily cover at authorized double-lined landfills in accordance with the receiving facility's permit.

Several NH landfills are already permitted to use CWDP No. 9, issued July 2, 1999. Based on a review of the approval issued in 1999 and the requested certification under review herein, there is limited to no functional difference in the product.

To assist receiving facility's already authorized to accept Propat® as approved in the July 2, 1999 certification, the certification issued subsequent to this review supersedes the prior certified waste-derived product approval of Propat®.

With conditions, this criterion is met.

(2) "Pose a greater risk to the environment, public health and safety than does the production of an existing comparable non-waste-derived product or, if no comparable non-waste-derived product exists, by directly disposing of the waste in accordance with the solid waste rules; and"

The applicant states in the application that Propat® used as landfill daily cover will not pose a greater risk than the use of a non-waste-derived product as daily cover.

NHDES Assessment and Determination

A comparable non-wastes-derived product is soil. Based on the characteristics of Propat® and experience with a similar product, NHDES does not anticipate that Propat® will pose a greater risk to the environment, public health and safety than does the production of soil, provided such production takes place using a defined process and occurs at a regulated facility. Prolerized uses a patented process to produce Propat® at its regulated facility in Everett, MA.

To ensure Propat® meets this requirement, the certification requires that Propat® be produced as specified

Application Review Summary				
Facility	Prolerized New England Co., LLC	Reviewer	Jaime M. Colby, P.E.	
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Permit No.	None			
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in U.S. Patent No. 5,468,291, dated November 21, 1995, at the Prolerized New England Co., LLC facility in Everett, MA using shredder residue generated by the same facility.

With conditions, this criterion is met.

• (b) "Disposal of the waste-derived product shall not pose a greater risk to the environment, public health and safety than would be posed by directly disposing of the waste from which the product is produced.

The applicant states in the application that Propat®, if not used as a daily cover, would be disposed of in a landfill; therefore, it does not pose a greater risk to the environment, public health and safety than disposing of Propat® as a waste.

NHDES Assessment and Determination

This rule is regarding disposal of the waste used to make Propat® compared to the disposal of Propat® itself.

NHDES has determined that disposal of Propat® will not pose a greater risk to the environment, public health and safety than would disposal of the shredder residue.

This criterion is met.

Overall NHDES Determination

Based on a review of the information provided and the criteria specified in Env-Sw 1504.04 through Env-Sw 1504.06, the criteria for certification of Propat® are met.