

**Fiscal Impact Analysis for  
Rule Readoption 10A NCAC 15 .1418**

**Agency:** North Carolina Radiation Protection Section

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**Impact Summary:** State Government: No  
 Local Government: No  
 Federal Government: No  
 Substantial Economic Impact: No

**Statutory Authority:** G.S. § 104E-7(a)(7)  
 G.S. § 104E-9.1

**Rule Citations:** 10A NCAC 15 .1418 Records: Reports and Operating Requirements – Readopt rule with substantive changes to require documentation of clients’ skin type and documentation of number of hours on lamps. (See Addendum for rule.)

**Summary**

The agency is proposing to readopt with substantive changes a tanning salon rule to require documentation by the facility owner of two items: 1) the client’s skin type, as determined by a skin typing chart, and 2) the number of hours on the tanning bulbs.

The rule already requires that registrants determine the client’s skin type, but there is currently no requirement that the skin type is documented on the client tan record or elsewhere. This creates a situation where the Radiation Protection Section (RPS) inspector cannot verify whether the registrant has performed a skin typing of the client or not. The expected benefit of this rule change is to reduce injuries resulting from over-exposure to UV radiation (skin burns) by correctly determining the client’s skin type.

The registrant is also required by the rule to replace tanning bed lamps at a frequency that is recommended by the lamp manufacturer and is determined by the number of hours that the lamp has been used. The only way to determine whether a lamp needs to be replaced is by tracking the number of hours the lamp is used. The current rule doesn’t require any record to be kept of the number of hours on bulbs. Without this documentation there is no way for the inspector or the facility owner to know if the bulbs are being replaced at the appropriate frequency. The agency estimates that salons would incur a cost of \$6,948/yr due to the additional time it will require to adhere to these rule changes. Table 1 presents a summary of impacts.

**Table 1: Costs and Benefits by Affected Party for Rule Changes Requiring Documentation (Fiscal Year 2020)**

	Cost	Benefit
Registrants	\$6,948	\$0
Local Government	\$0	\$0
State Government	\$0	\$0
Tanners	\$0	Reduced Risk of Injury
Federal Government	\$0	\$0
<b>Total</b>	<b>\$6,948</b>	<b>Unquantified</b>

## **Background**

NC Tanning Regulations: The Radiation Protection Section (RPS) is responsible for enforcing rules pertaining to tanning facilities in 10A NCAC 15 .1400. This authority is obtained from the North Carolina Radiation Protection Act (G.S. 104E) which established the Radiation Protection Commission with the powers to “...provide by rule and regulation for an electronic product safety program to protect the public health and safety, which program may authorize regulation and inspection for sources of non-ionizing radiation throughout the state”. Ultraviolet (UV) lamps used for tanning are a source of non-ionizing radiation. The NC Radiation Protection Commission initially adopted rules for protection against radiation associated with tanning facilities effective June 1, 1989.

Currently, Rule 10A NCAC 15 .1418 (i)(5) states that the registrant shall certify that all tanning bed operators are trained in the determination of skin type of customers... The procedure of “skin typing” a client is one of the most important duties of the certified operator as correct skin typing helps prevent injuries from burns. Skin typing entails using a chart or set of questions to determine a client’s natural skin pigmentation on a scale of I - VI. This procedure must be performed before putting a client in a tanning bed because all tanning beds have an “exposure schedule” based on the skin type of the client (see example below). At this time, it is not required that the operator record the skin type on the client tan record (only that they know how to determine it) so there is no way for the inspector to determine whether this step has been conducted. This rule readoption would require the tanning operator to document the client’s skin type on the client tan record, both ensuring that this important safety measure is taken and that the inspector has a way to determine if it has been done.

### **Example Exposure Schedule on a Tanning Bed**

Skin Types	First Session	Week 1	Week 2	Week 3	Week 4
in Type I	<i>Unable to tan. Do not expose Skin Type I to indoor tanning.</i>				
in Type II	3 minutes	3 minutes	5 minutes	8 minutes	12 minutes
in Type III	3 minutes	3 minutes	5 minutes	8 minutes	15 minutes
in Type IV	3 minutes	4 minutes	8 minutes	13 minutes	20 minutes
in Type V	3 minutes	5 minutes	9 minutes	16 minutes	20 minutes
in Type VI	3 minutes	6 minutes	10 minutes	16 minutes	20 minutes

Currently, Rule 10A NCAC 15 .1418 (h) states that the registrant shall replace ultraviolet lamps and bulbs after such duration of use as is recommended by the manufacturer of such lamps and bulbs. The manufacturer recommends that UV lamps be replaced after a certain number of hours of use, usually in the 800-1,000 hour range. The only way to know the number of hours for which a UV lamp has been used is to document the date the lamps were changed and then to track the number of minutes on the bed since that date. Many facilities use computer software where the date of lamp replacement is entered and the software tracks the number of minutes on the lamps from that date. This is an acceptable way to document lamp hours, as the number of hours on each bed can be shown during an inspection. When computer software is not employed, the minute counter on the bed can be used. The minute counter on the bed records the number of minutes the bed has been used. At the time the lamps are replaced, the number of minutes on the bed should be recorded in the maintenance log. During an inspection, the number of minutes on the lamps can be calculated by subtracting the number of minutes on the bed on the replacement date from the number of minutes on the inspection date. While the rule currently requires that lamps be replaced at the appropriate frequency, it does not require that the facility keep track of lamp hours. Without this documentation, the inspector cannot determine if the lamps

have been replaced at the appropriate frequency, and neither can the salon owner. Occasionally this leads to RPS requiring that the facility replace all the lamps in the bed and begin tracking lamp hours. This rule readoption will allow RPS inspectors to have an enforceable rule for proper documentation and record keeping. Ultimately this documentation should lead to more timely lamp replacement which will lead to more standard UV output from lamps which will reduce the incidence of clients getting burned.

## **Anticipated Fiscal Impact**

### 1. Required Documentation of Skin Type

The rule readoption requiring documentation of skin type will have minimal costs for salon owners. The current procedure with a new tanning client includes having the client sign a Consumer Statement, which warns of the dangers of tanning, and to start a Client Tan Record where dates and durations of tanning is recorded, and to determine the Skin Type of the client. This rule readoption requiring documentation of the skin type should only take about 10 extra seconds of the operator's time. While there is no data on the number of new tanning clients per facility, we know there are 757 tanning facilities in North Carolina. If we generously assume that each of these 757 facilities will have on average one new client a week and that it will take an extra ½ minute to record this information and that tanning operators get paid \$15/hr, we can assume it will cost all facilities about **\$4,920 per year** = 757 facilities x 1 client/wk x 52 wks/yr x ½ min x 1hr/60min x \$15/hr

The amount of extra time it will take RPS inspectors to look for this documentation will be negligible, as they already request client tan records for review and already ask operators if they know how to skin type clients.

There is an unquantified benefit for tanners of reduced risk of injury due to better enforcement of skin typing.

### 2. Required Documentation of Lamp Hours

The rule readoption requiring documentation of lamp hours will have minimal costs for salon owners. In 2019, there are 4,057 registered tanning beds and booths in NC. Approximately 80% of facilities are already documenting lamp hours so that they can meet the requirements of timely lamp replacement. If 20% of facilities are not documenting lamp hours, that is about 811 tanning units. If the average bed has to have lamps replaced twice a year and it takes 5 additional minutes after changing the lamps to document this in the maintenance log, that is an additional 8,110 minutes per year, or 135 hours. If the average tanning operator gets paid \$15/hr, this is an additional cost of **\$2,028 per year** for all facilities.

The amount of extra time it will take inspectors to look for this documentation will be negligible, as they are already requesting documentation of lamp hours.

There is an unquantified benefit for tanners of reduced risk of injury due to better equipment maintenance.

10A NCAC 15 .1418 is proposed for readoption with substantive changes as follows:

**10A NCAC 15 .1418 RECORDS: REPORTS AND OPERATING REQUIREMENTS**

(a) Prior to initial exposure, the registrant shall provide each consumer the opportunity to read a copy of the warning specified in Rule .1414(b) of this Section and have the consumer sign a statement that the information has been read and understood. For illiterate or visually impaired persons unable to read, the warning statement shall be read aloud by the operator to that individual, in the presence of a witness, and the witness and the operator shall sign the statement.

(b) The registrant shall maintain a record of each consumer's total number of tanning visits, including dates and durations of tanning exposures.

(c) The registrant shall determine each consumer's skin type using a method that distinguishes between six skin types and record the skin type on the client tan record.

~~(e)~~ (d) The registrant shall submit a written report of injury for which medical attention was sought or obtained from the use of registered tanning equipment to the Radiation Protection Section within five business days after occurrence. The report shall include:

- (1) the name of the affected individual;
- (2) the name and location of the tanning facility involved;
- (3) the nature of the actual or alleged injury; and
- (4) any other information relevant to the actual or alleged injury, including the date and duration of exposure and any documentation of medical attention sought or obtained.

~~(d)~~ (e) The registrant shall not allow individuals under the age of 18 to use tanning equipment.

~~(e)~~ (f) The registrant shall verify by checking legal identification that includes a driver's license, a passport, or military identification, each consumer is 18 years of age or older.

~~(f)~~ (g) The registrant shall not allow minors to remain in the tanning room while the tanning equipment is in operation.

~~(g)~~ (h) The registrant shall replace defective or burned out lamps, bulbs, or filters with a type intended for use in the affected tanning equipment as specified by the manufacturer's product label and having the same spectral distribution (certified equivalent lamp).

~~(h)~~ (i) The registrant shall replace ultraviolet lamps and bulbs that are not otherwise defective or damaged at such frequency or after such duration of use as is recommended by the manufacturer of such lamps and bulbs.

(j) The registrant shall document the number of hours that ultraviolet lamps and bulbs are used.

~~(i)~~ (k) The registrant shall certify that all tanning equipment operators are trained in ~~at least~~ the following:

- (1) the requirements of this Section;
- (2) procedures for correct operation of the tanning facility and tanning equipment;
- (3) recognition of injury or overexposure to ultraviolet radiation;
- (4) the tanning equipment manufacturer's procedures for operation and maintenance of the tanning equipment;
- (5) the determination of skin type of customers and determination of duration of exposure to registered tanning equipment; and
- (6) emergency procedures to be followed in case of injury.

~~(j)~~ (l) The registrant shall allow operation of tanning equipment only by and in the physical presence of persons who have completed formal training courses that meet the requirements of ~~Subparagraphs (i)(1) to (6)~~ Subparagraph (k) of this Rule.

~~(k)~~ (m) The registrant shall maintain a record of operator training required in ~~Paragraphs (i) and (j)~~ Paragraph (k) of this Rule for inspection by authorized representatives of the agency.

~~(l)~~ (n) No registrant shall possess, use, operate, or transfer tanning equipment or their ultraviolet radiation sources in such a manner as to cause any individual under 18 years of age to be exposed to radiation emissions from such equipment.

~~(m)~~ (o) Each registrant shall make available to all employees current copies of the following documents:

- (1) the facility's certificate of registration with the Radiation Protection Section; and
- (2) conditions or documents incorporated into the registration by reference and amendments thereto.

*History Note: Authority G.S. 104E-7(a)(7); 104E-9; 104E-9.1; 104E-12;  
Eff. June 1, 1989;  
Amended Eff. August 1, 2002; May 1, 1993; May 1, 1992;  
Transferred and Recodified from 15A NCAC 11 .1418 Eff. February 1, 2015;  
Amended Eff. May 1, 2016- 2016;  
Readopted Eff. October 1, 2020.*