Tammy P. Sadek, DVM RSO AU and Kerry Lewis, DVM
Riverside Cat Hospital
2339 Jolly Rd
Okemos, MI 48864

October 30, 2025

Jason Kelly
Health Physicist
Materials Licensing Branch
US Nuclear Regulatory Commission
Region III
2056 Westings Ave, Suite 400
Naperville, IL 60563-2657

Dear NRC and Mr Kelly:

We are requesting an amendment to our Riverside Cat Hospital NRC License No 21-35775-01 Docket No 030-39402 to add two veterinarians. Kerry Lewis, DVM and Nachamari Rivera-Rios on to the license as Authorized Users. They have completed their AU Physics training, DOT HAZMAT training, and I131 Medical AU training. They are extremely competent and well versed in I131 radiation safety as well as the I131 medical care of hyperthyroid cats. Please see the appended files. Please let us know if you need any additional information.

Kind regards,

Tammy P. Sadek DVM RSO

Tammy P. Sadek, DVM RSO AU Diplomate, ABVP Feline Practice
CEO, Cat Hyperthyroid Radioactive Iodine Services, LLC
PO Box 240
Belding, ME 48809
Tsadekdvm@icloud.com 616-581-1871

Kerry Lewis

Kerry Lewis
Riverside Cat Hospital
2339 Jolly Rd
Okemos, MI 48864

Certificate of Completion

This is to certify that

Kerry Lewis, DVM

Has successfully completed DOT HAZMAT training pertaining to the procurement of packages containing radioactive materials on the following date:

February 7, 2025

This training covers the following topics and a test was successfully completed to assure understanding of the material:

- **General Awareness of the following regulations:**
  - **49 CFR Part 171-180**
  - **10 CFR Part 30.34(c) and Part 30.41**
  - **10 CFR Part 71**
- **Familiarization with the Hazardous Materials Regulations**
- **Job function training**
- **Safety Training**
- **Security Training**

and complies with: 10 CFR Part 30, USNRC, 10 CFT 71 DOT, MDCH, MDEQ, and 49 CFR Hazardous Materials Regulations, Subpart H.

MVPhysics, LLC

Matthew Buczek, M.S., DABR
MVPhysics, LLC
Midland, Michigan

11/12 correct
Submitted 2/7/2025

DOT Hazmat Training Quiz

You must score 11/12 questions correct to pass this quiz.

Email *

kerrylewisdvm@gmail.com

Enter the Password *

Questions

Select all that apply: Hazardous material training is required for all employees involved with the: *

- [x] packaging of packages containing radioactive materials
- [x] marking of packages containing radioactive materials
- [x] labeling of packages containing radioactive materials
- [x] measuring of packages containing radioactive materials
- [x] loading of packages containing radioactive materials
- [x] transporting of packages containing radioactive materials

The TI number is the: *

- ○ Exposure measured at 1 foot from the transporters vehicle
- ○ A direct measurement for the activity inside the package
- ◉ Exposure measured at 3 feet from the package
- ○ radiation level measured in mR/foot

True or False, the highest exterior exposure would be with a Yellow III package. *

- ◉ True
- ○ False

The surface exposure rate limit for a Radioactive Yellow III package is: *

- ○ 2000mR/hr
- ◉ 200mR/hr
- ○ 50mR/hr
- ○ 5mR/hr
- ○ 0.5mR/hr

The trigger limit for a wipe test on the exterior of a radioactive package is (see page two of handout for details): *

- (●) 2200dpm/100cm^2
- ( ) 50dpm/100cm^2
- ( ) 5dpm/100cm^2
- ( ) 0.5dpm/100cm^2

"Limited Quantity" packages are: *

- (●) The packages returned to the Nuclear Pharmacy with residual activity
- ( ) Yellow II's only
- ( ) While I's only
- ( ) Unlabeled

If you receive a Radioactive package that appears to be leaking – Prior to opening, you should: *

- (●) Call the RSO and shipper
- ( ) Call the Authorized Users for facility
- ( ) Call the NRC
- ( ) Call the FAA

When wipe testing a package, the minimum area that is allowed during a wipe test is: *

- (●) 300 squared cm
- ( ) 3 squared cm
- ( ) 0.5 mR/hour
- ( ) A 1mm square area

For transporting radioactivity, emergency response information: *

- ( ) Is not required for "Limited Quantities" packages
- ( ) Is to be secured within the package and locked
- ( ) Only needed with Yellow III packages
- (●) Should be accessible to the driver at all times

True or False, a White I package has the highest exposure rate a person can ship. *

- ( ) True
- (●) False

The maximum activity of I-131 that can be shipped as a "Limited quantity" is: *

- ○ 10mCi
- ○ 11mCi
- ◉ 1.89mCi
- ○ 1mCi

If I am unsure or have questions about any of this Hazmat training is should ask _____ for assistance. *

Radiation Safety Officer (RSO)

Certificate of Completion

This is to certify that

Kerry Lewis, DVM

has satisfactorily completed 10 hours of Authorized User Physics training for

Iodine-131 Feline Therapy Treatments

Including Iodine-131 Regulation and Safety Protocols, Radiation Protection Principles, Characteristics of Ionizing Radiation, Units of Radiation Dose and Quantities, Radiation Detection Instrumentation, Biological Hazards of Exposure to I-131 Radiation and Hazardous Material / Department of Transportation training

February 5, 2025

MVPhysics, LLC

Matthew Buczek, M.S., DABR
MVPhysics, LLC
Midland, Michigan

Certificate of Completion

I131 Authorized User Training

Is Awarded to

Kerry Lewis, D.V.M.

Has successfully completed 40 hours of Clinical I131 training, including I131 handling, administration, patient care, waste disposal, and emergency management consistent with the Nuclear Regulatory Commission radiation training requirements.

October 30, 2025

Tammy P. Sadek, DVM RSO

Tammy P. Sadek, D.V.M. DABVP Feline

Authorized User, Radiation Safety Officer

Riverside Cat Hospital

2339 Jolly Rd

Okemos, MI 48864

I 131 Authorized User Training Documentation Cat Hyperthyroid Radioactive Iodine Services (CHRIS)

Every Authorized User must fulfill the following training and educational specifications based on NRC regulations. Agreement states (rather than NRC states) may have additional requirements.

Authorized user trainee name: Kerry Lewis, DVM
Academic Degree(s): Doctor of Veterinary Medicine

Facility Name and Address: Riverside Cat Hospital
2339 Jolly Rd
Okemos, MI 48864

NRC radioactive materials license #- 21-35775-01

Radiation Physicist training (Matt Buczek at MV Physics) and Authorized User Medical Training (Tammy Sadek, DVM, RSO at Cat Hyperthyroid Radioactive Iodine Services) covers:

Radiation Protection Principles ☑
Characteristics of Ionizing Radiation ☑
Units of Radiation Dose and Quantities ☑
Radiation Detection Instrumentation ☑
Biological Hazards of Exposure to Radiation (appropriate to the types and forms of byproduct) ☑
Hands on Use of I 131 Radioactive Material ☑

Radiation Literature review Hours: 2 Date: 2/1/25

MV Physics onsite/remote training
1/26/25 Lecture 1: ___ 1 hour Date:

Lecture 2: ___ 1 hour Date:
1/26/25

Lecture 3: ___ 1 hour Date:
1/27/25

Lecture 4: ___ 1 hour Date: 2/2/25
Lecture 5: ___ 1 hour Date: 2/2/25
Lecture 6: ___ 1 hour Date: 2/2/25
Lecture 7: ___ 1 hour Date: 2/3/25
Lecture 8: ___ 1 hour Date: 2/3/25
Self-study: ___2 hours Date: 2/16/25

2/16/25

MV Certificate of completion: Date: 2/5/2025

Hazmat/ DOT training and certification Hours: 1 Date: 2/5/2025

CHRIS Medical I 131 Authorized User training:

I 131 Medical Literature Review Self Study: 5 Hours: Date(s): 1/25/25; 2/14/25; 2/16/25

I131 CHRIS Riverside Cat Hospital onsite/Zoom Hours: 14.5 Date(s):

2/13/25 1.5 hours
2/20/25 1.5 hours
3/6/25 1.5 hours
6/17/25 10 hours

Patient Selection ☑

- Confirmation of hyperthyroidism
  - Palpable cervical nodule
  - Total T4
  - Free T4
  - TSH level: feline TSH vs canine TSH measurement
  - T3 Suppression test
- Evaluation for thyroid neoplasia and comorbidities
  - Required contemporaneous (within 30 days) testing:
    - Chest radiographs
    - Serum chemistries
      - IRIS Staging of kidneys
      - Liver enzyme elevation? Primary vs secondary?
    - Serum electrolytes
      - Hypokalemia: low total body K potassium is common in hyperthyroid cats; supplement K if serum K < 3.9
    - Total T4 +/- free T4; dosing is based on total T4 only but free T4 can be used in borderline hyperthyroid cases to assess for treatment
    - Urinalysis
  - Recommended contemporaneous testing:
    - Blood pressure

Other pretreatment recommendations may include:

Abdominal ultrasound
Technetium scan
Supplementation with oral potassium
Beta blocker such as atenolol for tachycardia
Amlodipine or telmisartan for hypertension
Cobalamin therapy for IBD
Cervical ultrasound and nodule aspiration

Patient dose calculation ☑

T4 level
Size of nodule
Comorbidities
Known thyroid neoplasia

Referring veterinarian communication pre-treatment ☑

Required pre-treatment patient information needed
Required post -treatment patient labs and evaluation, timing, and how to send this information back to the I131 hospital
How to contact I131 doctor with questions regarding their patient

Client communication ☑

Possibility of prolonged hypothyroidism
Possibility of persistent hyperthyroidism and necessity of retreatment with I131 or treatment with methimazole, surgery, or Y/D food
Discussion of home quarantine requirements including waste management, duration and type of quarantine, longer quarantine with pregnant women or children <18 years of age are present. Discussion of referral to physician questions regarding pet caretakers who are immunocompromised, currently being treated for cancer, or have other health problems
Discussion comparing the amount of radiation care- taker will receive is comparable to that of a round-trip airline flight when they follow the rules of the quarantine
Discussion that cat must come back to I131 hospital for care if needed rather than another hospital during first 2 weeks post discharge
Discussion that pet's remains will need to be kept in I131 room for 81 days if the cat passes away during hospitalization or home quarantine time.

Patient management ☑

Planned pre-medications, I131 dose

Initial assessment:
Is patient in crisis? Address any issues prior to administration of I131.
- Thyroid storm
- Congestive heart failure
- Hypertensive crisis
- Hypokalemia- start potassium supplementation if present and continue post treatment pending post quarantine labs.
- Tachycardia- start atenolol and continue during hospitalization or until tachycardia resolves.
- Blood pressure- start amlodipine if hypertension is significant.

Is the level of weight loss and debilitation consistent with the level of thyroid disease? Discuss the weight loss may be due to other health issues such as IBD or lymphoma.
Adjust ongoing and pre-treatment medications if needed

Equipment training: CHRIS Dr Sadek and Dorene Culp LVT ☑
- Geiger counter Supervisor: Sadek/Culp ☑
- Well Counter Supervisor: Sadek/Culp ☑
- Hospital Monitoring Supervisor: Sadek/Culp ☑

Handling I131: Sadek/Culp ☑
I131 Package receipt ☑
I131 Room admittance requirements ☑
- I131 training
- Personal protective gear
- Radiation dosimeter badges
  - Finger
  - Collar
  - Dosimeter reports

I 131 administration ☑
- Use of large pill gun
- Monitoring for vomiting post I131 capsule
- What to do if vomiting occurs
  - Visible capsule- re-administer
  - No visible capsule
    - Geiger cat

In Hospital Care ☑
- Daily monitoring
  - Heart rate
  - Respiration
  - Blood pressure if indicated
  - Appetite
  - Routine patient interventions

Appetite stimulant
Antianxiety meds
Antinausea medications

Client Webcam access ☑

Patient release home from I131 ward ☑

Geiger patient readings

Performed outside room due to Geiger counter measuring other radiation sources (I131 waste, other I131 patients) in the I131 room

<0.5 mR/hr at 1 feet distance from the cat using alternate protocol; 0.25mCi/hr at 1 foot distance using standard protocol

I131 Ward Management ☑

I131 waste storage and disposal ☑
Litter box waste
Food/H20
Bedding
Vomitus
Cleaning products allowed (no bleach)
Freezer for I131 pet remains

I131 spill cleanup ☑

Urine
Vomitus
Blood
Ruptured I131 capsule

Major vs minor spills: cleanup and documentation, notifying the RSO and controlling personnel access to location; wipe count must be less than 200 DPI/100cm^2 outside the room and less than 2000 DPI /100 cm^2 inside the room

Spills on personnel

Laundry/clothing spill

Wash out in room and Geiger <0.1 mR/hr 0.1 using 0.1mR/hr and fast settings OR
Hold for 81 days and Geiger

Skin exposure

Wash affected area with soap and water, Geiger as usual and repeat until <0.1mR/hr as usual

Emergency I131 patient case management ☑

Personnel exposure

Measuring radiation of emergency items

Cleaning up emergency items

Lab equipment flush

Lab samples

Emergency equipment-if equipment was temporarily moved into the I131 room, wipe down with water, Geiger (using the 0.1mR/hr and fast settings just like when scan yourself leaving the room) outside of room to make sure no contamination present (should be <0.1 mR/hr just like when scan yourself leaving room) . If reading> than 0.1mR/hr, take equipment back into I 131 room and clean again. Repeat until reading < 0.1mR/hr using the 0.1mR/hr and fast settings.

Long term case follow- up ☑

Referral veterinarian report

Follow up exam at 3-4 weeks post- treatment (records from referring vet, request if do not receive)

Weight gain?

Improved muscle mass?

Attitude/ behavior?

Hair coat?

Follow up labs:

CBC

Serum chemistries

How much have renal parameters increased?

Have increased liver enzymes resolved?

Electrolytes- has hypokalemia resolved?

Total T4

<0.8- evaluate with renal values, TSH, clinical signs; do not supplement unless renal changes are significant or cat is clinically looking hypothyroid

<4.0- recheck in 2-4 months

>4.0- depending on initial T4 and clinical signs, , monitor for another 1-3 months or consider follow up treatment with I131, surgery, methimazole, or Y/D.

TSH

Is TSH suppressed or increased? What is the T4? If TSH is still low (suppressed) and T4 is low then wait on thyroxine. If TSH is high then consider the cat globally and either wait and recheck in 1 month, or if kidney values have dramatically worsened consider supplementation. Avoid levothyroxine supplementation when possible as supplementation will suppress TSH and result in hypothyroidism long term.

Patient home quarantine requirements ☑

Need a space 8 feet away from humans

Spare bedroom

Basement

Can consider limiting human locations in the house to allow the cat free movement if unable to adequately quarantine the cat in the home otherwise.

30 minutes total time in the quarantine area per adult per day, can be split into several shorter sessions. Stay at arms- length distance, bend down to pet rather than holding in arms. If sitting next to the cat, have a large pillow separating the pet and human on sofa.

Waste- flushable litter, scooping and flushing q 12 hours; or scooping q 12 hours, and holding waste in a closed container > 8 feet from living area (such as a garage or balcony or basement) for 81 days before disposal.

1-week full quarantine with above restrictions and a second week of home confinement only in households with non-pregnant adults only.

2 weeks of full quarantine when children under 18 years of age and pregnant individuals are pregnant. Children and pregnant individuals are not allowed in the quarantine room.

Clean up any vomit, saliva, blood, urine or stool outside the litter box with soap and water and flush down toilet or hold for 81 days. Do not use bleach.

Supervised onsite I131 Case training: CHRIS Supervisor Dr Sadek: 32 hours

Case 1:	Hours: 3	Date: 7/29/25; 1 hour 7/30/25
Case 2:	Hours: 3	Date: 7/29/25; 1 hour 7/30/25
Case 3:	Hours: 3	Date: 7/29/25; 1 hour 7/30/25
Case 4:	Hours: 3	Date: 9/8/25; 1 hour 9/9/25
Case 5:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25
Case 6:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25
Case 7:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25
Case 8:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25

Additional Training: Final project – I131 patient client video **Hours: 5** Date: 10/1/25

Total Medical Hours Training: **56.5 hours** (40+) Date: 10/28/25
Certificate of Completion: Date: 10/30/25

Authorized User Trainee signature: _____
Date: 10/30/25

Radiation Safety Officer: T. P. Sadek DVM RSO Date: 10/30/25

Based on the above information and the NRC requirements we have determined that 40 hours of documented training in the use of I 131 in the treatment of feline hyperthyroidism along with 10 hours radiation safety physics training will be considered sufficient and appropriate training.

Tammy P. Sadek, DVM RSO
Cat Hyperthyroid Radioactive Iodine Services
TSadekDVM@icloud.com
616-581-1871

Certificate of Completion

This is to certify that

Nachamari Rivera-Rios, DVM

Has successfully completed DOT HAZMAT training pertaining to the procurement of packages containing radioactive materials on the following date:

February 1, 2025

This training covers the following topics and a test was successfully completed to assure understanding of the material:

- **General Awareness of the following regulations:**
  - **49 CFR Part 171-180**
  - **10 CFR Part 30.34(c) and Part 30.41**
  - **10 CFR Part 71**
- **Familiarization with the Hazardous Materials Regulations**
- **Job function training**
- **Safety Training**
- **Security Training**

and complies with: 10 CFR Part 30, USNRC, 10 CFT 71 DOT, MDCH, MDEQ, and 49 CFR Hazardous Materials Regulations, Subpart H.

MVPhysics, LLC

Matthew Buczek, M.S., DABR
MVPhysics, LLC
Midland, Michigan

12/12 correct
Submitted 2/1/2025

DOT Hazmat Training Quiz

You must score 11/12 questions correct to pass this quiz.

Email *

drrivera@riversidecathospital.com

Enter the Password *

VetPhysics

Questions

Select all that apply: Hazardous material training is required for all employees involved with the: *

- [x] packaging of packages containing radioactive materials
- [x] marking of packages containing radioactive materials
- [x] labeling of packages containing radioactive materials
- [x] measuring of packages containing radioactive materials
- [x] loading of packages containing radioactive materials
- [x] transporting of packages containing radioactive materials

The TI number is the: *

- ○ Exposure measured at 1 foot from the transporters vehicle
- ○ A direct measurement for the activity inside the package
- ◉ Exposure measured at 3 feet from the package
- ○ radiation level measured in mR/foot

True or False, the highest exterior exposure would be with a Yellow III package. *

- ○ True
- ◉ False

The surface exposure rate limit for a Radioactive Yellow III package is: *

- ○ 2000mR/hr
- ◉ 200mR/hr
- ○ 50mR/hr
- ○ 5mR/hr
- ○ 0.5mR/hr

The trigger limit for a wipe test on the exterior of a radioactive package is (see page two of handout for details): *

- (●) 2200dpm/100cm^2
- ( ) 50dpm/100cm^2
- ( ) 5dpm/100cm^2
- ( ) 0.5dpm/100cm^2

"Limited Quantity" packages are: *

- (●) The packages returned to the Nuclear Pharmacy with residual activity
- ( ) Yellow II's only
- ( ) While I's only
- ( ) Unlabeled

If you receive a Radioactive package that appears to be leaking – Prior to opening, you should: *

- (●) Call the RSO and shipper
- ( ) Call the Authorized Users for facility
- ( ) Call the NRC
- ( ) Call the FAA

When wipe testing a package, the minimum area that is allowed during a wipe test is: *

- (●) 300 squared cm
- ( ) 3 squared cm
- ( ) 0.5 mR/hour
- ( ) A 1mm square area

For transporting radioactivity, emergency response information: *

- ( ) Is not required for "Limited Quantities" packages
- ( ) Is to be secured within the package and locked
- ( ) Only needed with Yellow III packages
- (●) Should be accessible to the driver at all times

True or False, a White I package has the highest exposure rate a person can ship. *

- ( ) True
- (●) False

The maximum activity of I-131 that can be shipped as a "Limited quantity" is: *

- ○ 10mCi
- ○ 11mCi
- ◉ 1.89mCi
- ○ 1mCi

If I am unsure or have questions about any of this Hazmat training is should ask _____ for assistance. *

contact physicist and/or RSO

Certificate of Completion

This is to certify that

Nachamari Rivera-Rios, DVM

has satisfactorily completed 10 hours of Authorized User Physics training for

Iodine-131 Feline Therapy Treatments

Including Iodine-131 Regulation and Safety Protocols, Radiation Protection Principles, Characteristics of Ionizing Radiation, Units of Radiation Dose and Quantities, Radiation Detection Instrumentation, Biological Hazards of Exposure to I-131 Radiation and Hazardous Material / Department of Transportation training

February 5, 2025

MVPhysics, LLC

Matthew Buczek, M.S., DABR
MVPhysics, LLC
Midland, Michigan

Certificate of Completion

I131 Authorized User Training

Is Awarded to

Nacha Rivera-Rios, D. V.M.

Has successfully completed 40 hours of Clinical I131 training, including I131 handling, administration, patient care, waste disposal, and emergency management consistent with the Nuclear Regulatory Commission radiation training requirements.

October 30, 2025

Tammy P. Sadek DVM RSO

Tammy P. Sadek, D.V.M. DABVP Feline

Authorized User, Radiation Safety Officer

Riverside Cat Hospital

2339 Jolly Rd

Okemos, MI 48864

I 131 Authorized User Training Documentation Cat Hyperthyroid Radioactive Iodine Services (CHRIS)

Every Authorized User must fulfill the following training and educational specifications based on NRC regulations. Agreement states (rather than NRC states) may have additional requirements.

Authorized user trainee name: Nachamari Rivera-Rios, DVM
Academic Degree(s): Doctor of Veterinary Medicine

Facility Name and Address: Riverside Cat Hospital
2339 Jolly Rd
Okemos, MI 48864

NRC radioactive materials license #- 21-35775-01

Radiation Physicist training (Matt Buczek at MV Physics) and Authorized User Medical Training (Tammy Sadek, DVM, RSO at Cat Hyperthyroid Radioactive Iodine Services) covers:

Radiation Protection Principles ☑
Characteristics of Ionizing Radiation ☑
Units of Radiation Dose and Quantities ☑
Radiation Detection Instrumentation ☑
Biological Hazards of Exposure to Radiation (appropriate to the types and forms of byproduct) ☑
Hands on Use of I 131 Radioactive Material ☑

Radiation Literature review Hours: 1 Date: 2/1/25

MV Physics onsite/remote training

Lecture 1: ___ 1 hour	Date: 2/1/25
Lecture 2: ___ 1 hour	Date: 2/1/25
Lecture 3: ___ 1 hour	Date: 2/2/25
Lecture 4: ___ 1 hour	Date: 2/3/25
Lecture 5: ___ 1 hour	Date: 2/3/25
Lecture 6: ___ 1 hour	Date: 2/4/25
Lecture 7: ___ 1 hour	Date: 2/4/25
Lecture 8: ___ 1 hour	Date: 2/5/25
Self-study: ___2 hours	Date: 2/5/25

MV Certificate of completion: Date: 2/5/2025

Hazmat/ DOT training and certification Hours: 1 Date: 2/1/2025

CHRIS Medical I 131 Authorized User training:

I 131 Medical Literature Review Self Study: 5 Hours: Date(s): 2/3/25

I131 CHRIS Riverside Cat Hospital onsite/Zoom Hours: 10.5 Date(s):

2/13/25 1.5 hours
2/20/25 1.5 hours
3/6/25 1.5 hours
6/17/25 6 hours

Patient Selection ☑

- Confirmation of hyperthyroidism
  - Palpable cervical nodule
  - Total T4
  - Free T4
  - TSH level: feline TSH vs canine TSH measurement
  - T3 Suppression test
- Evaluation for thyroid neoplasia and comorbidities
  - Required contemporaneous (within 30 days) testing:
    - Chest radiographs
    - Serum chemistries
      - IRIS Staging of kidneys
      - Liver enzyme elevation? Primary vs secondary?
    - Serum electrolytes
      - Hypokalemia: low total body K potassium is common in hyperthyroid cats; supplement K if serum K < 3.9
    - Total T4 +/- free T4; dosing is based on total T4 only but free T4 can be used in borderline hyperthyroid cases to assess for treatment
    - Urinalysis
  - Recommended contemporaneous testing:
    - Blood pressure

Other pretreatment recommendations may include:

- Abdominal ultrasound
- Technetium scan
- Supplementation with oral potassium
- Beta blocker such as atenolol for tachycardia
- Amlodipine or telmisartan for hypertension

Cobalamin therapy for IBD
Cervical ultrasound and nodule aspiration

Patient dose calculation ☑

T4 level
Size of nodule
Comorbidities
Known thyroid neoplasia

Referring veterinarian communication pre-treatment ☑

Required pre-treatment patient information needed
Required post -treatment patient labs and evaluation, timing, and how to send this information back to the I131 hospital
How to contact I131 doctor with questions regarding their patient

Client communication ☑

Possibility of prolonged hypothyroidism
Possibility of persistent hyperthyroidism and necessity of retreatment with I131 or treatment with methimazole, surgery, or Y/D food
Discussion of home quarantine requirements including waste management, duration and type of quarantine, longer quarantine with pregnant women or children <18 years of age are present. Discussion of referral to physician questions regarding pet caretakers who are immunocompromised, currently being treated for cancer, or have other health problems
Discussion comparing the amount of radiation care- taker will receive is comparable to that of a round-trip airline flight when they follow the rules of the quarantine
Discussion that cat must come back to I131 hospital for care if needed rather than another hospital during first 2 weeks post discharge
Discussion that pet's remains will need to be kept in I131 room for 81 days if the cat passes away during hospitalization or home quarantine time.

Patient management ☑

Planned pre-medications, I131 dose
Initial assessment:
Is patient in crisis? Address any issues prior to administration of I131.
Thyroid storm
Congestive heart failure
Hypertensive crisis

Hypokalemia- start potassium supplementation if present and continue post treatment pending post quarantine labs.
Tachycardia- start atenolol and continue during hospitalization or until tachycardia resolves.
Blood pressure- start amlodipine if hypertension is significant.

Is the level of weight loss and debilitation consistent with the level of thyroid disease? Discuss the weight loss may be due to other health issues such as IBD or lymphoma.

Adjust ongoing and pre-treatment medications if needed

Equipment training: CHRIS Dr Sadek and Dorene Culp LVT ☑
Geiger counter Supervisor: Sadek/Culp ☑
Well Counter Supervisor: Sadek/Culp ☑
Hospital Monitoring Supervisor: Sadek/Culp ☑

Handling I131: Sadek/Culp ☑
I131 Package receipt ☑
I131 Room admittance requirements ☑
I131 training
Personal protective gear
Radiation dosimeter badges
Finger
Collar
Dosimeter reports
I 131 administration ☑
Use of large pill gun
Monitoring for vomiting post I131 capsule
What to do if vomiting occurs
Visible capsule- re-administer
No visible capsule
Geiger cat
In Hospital Care ☑
Daily monitoring
Heart rate
Respiration
Blood pressure if indicated
Appetite
Routine patient interventions
Appetite stimulant
Antianxiety meds
Antinausea medications
Client Webcam access ☑

Patient release home from I131 ward ☑

Geiger patient readings

Performed outside room due to Geiger counter measuring other radiation sources (I131 waste, other I131 patients) in the I131 room

<0.5 mR/hr at 1 feet distance from the cat using alternate protocol; 0.25mCi/hr at 1 foot distance using standard protocol

I131 Ward Management ☑

I131 waste storage and disposal ☑

Litter box waste

Food/H20

Bedding

Vomitus

Cleaning products allowed (no bleach)

Freezer for I131 pet remains

I131 spill cleanup ☑

Urine

Vomitus

Blood

Ruptured I131 capsule

Major vs minor spills: cleanup and documentation, notifying the RSO and controlling personnel access to location; wipe count must be less than 200 DPI/100cm^2 outside the room and less than 2000 DPI /100 cm^2 inside the room

Spills on personnel

Laundry/clothing spill

Wash out in room and Geiger <0.1 mR/hr 0.1 using 0.1mR/hr and fast settings OR

Hold for 81 days and Geiger

Skin exposure

Wash affected area with soap and water, Geiger as usual and repeat until <0.1mR/hr as usual

Emergency I131 patient case management ☑

Personnel exposure
Measuring radiation of emergency items
Cleaning up emergency items
Lab equipment flush
Lab samples
Emergency equipment-if equipment was temporarily moved into the I131 room, wipe down with water, Geiger (using the 0.1mR/hr and fast settings just like when scan yourself leaving the room) outside of room to make sure no contamination present (should be <0.1 mR/hr just like when scan yourself leaving room) . If reading> than 0.1mR/hr, take equipment back into I 131 room and clean again. Repeat until reading < 0.1mR/hr using the 0.1mR/hr and fast settings.

Long term case follow- up ☑

Referral veterinarian report
Follow up exam at 3-4 weeks post- treatment (records from referring vet, request if do not receive)
Weight gain?
Improved muscle mass?
Attitude/ behavior?
Hair coat?
Follow up labs:
CBC
Serum chemistries
How much have renal parameters increased?
Have increased liver enzymes resolved?
Electrolytes- has hypokalemia resolved?
Total T4
<0.8- evaluate with renal values, TSH, clinical signs; do not supplement unless renal changes are significant or cat is clinically looking hypothyroid
<4.0- recheck in 2-4 months
>4.0- depending on initial T4 and clinical signs, , monitor for another 1-3 months or consider follow up treatment with I131, surgery, methimazole, or Y/D.
TSH
Is TSH suppressed or increased? What is the T4? If TSH is still low (suppressed) and T4 is low then wait on thyroxine. If TSH is high then consider the cat globally and either wait and recheck in 1 month, or if kidney values have dramatically worsened consider supplementation. Avoid levothyroxine supplementation when

possible as supplementation will suppress TSH and result in hypothyroidism long term.

Patient home quarantine requirements ☑

Need a space 8 feet away from humans

Spare bedroom

Basement

Can consider limiting human locations in the house to allow the cat free movement if unable to adequately quarantine the cat in the home otherwise.

30 minutes total time in the quarantine area per adult per day, can be split into several shorter sessions. Stay at arms- length distance, bend down to pet rather than holding in arms. If sitting next to the cat, have a large pillow separating the pet and human on sofa.

Waste- flushable litter, scooping and flushing q 12 hours; or scooping q 12 hours, and holding waste in a closed container > 8 feet from living area (such as a garage or balcony or basement) for 81 days before disposal.

1-week full quarantine with above restrictions and a second week of home confinement only in households with non-pregnant adults only.

2 weeks of full quarantine when children under 18 years of age and pregnant individuals are pregnant. Children and pregnant individuals are not allowed in the quarantine room.

Clean up any vomit, saliva, blood, urine or stool outside the litter box with soap and water and flush down toilet or hold for 81 days. Do not use bleach.

Supervised onsite I131 Case training: CHRIS Supervisor Dr Sadek: 32 hours

Case 1:	Hours: 3	Date: 7/29/25; 1 hour 7/30/25
Case 2:	Hours: 3	Date: 7/29/25; 1 hour 7/30/25
Case 3:	Hours: 3	Date: 7/29/25; 1 hour 7/30/25
Case 4:	Hours: 3	Date: 9/8/25; 1 hour 9/9/25
Case 5:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25
Case 6:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25
Case 7:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25
Case 8:	Hours: 3	Date: 10/27/25; 1 hour 10/28/25

Additional Training: Final project – Emergency management of I131 patients
Hours: **6** Date: 10/23/25

Total Medical Hours Training: 53.5 hours (40+) Date: 10/28/25
Certificate of Completion: Date: 10/30/25

Authorized User Trainee signature: [signature]
Date: 10/31/25

Radiation Safety Officer: [signature] Tammy P Sadek DVM Date: 10/30/25
RSO AU

Based on the above information and the NRC requirements we have determined that 40 hours of documented training in the use of I 131 in the treatment of feline hyperthyroidism along with 10 hours radiation safety physics training will be considered sufficient and appropriate training.

Tammy P. Sadek, DVM RSO
Cat Hyperthyroid Radioactive Iodine Services
TSadekDVM@icloud.com
616-581-1871

Martha Pavon

From: Tammy Tomczak
Sent: Thursday, November 13, 2025 9:23 AM
To: Martha Pavon
Cc: Sandy Pavon
Subject: FW: License amendment for US Materials License No. 21-35775-01 Docket No. 030-39402 Riverside Cat Hospital
Attachments: License Amendment Request Riverside Cat Hospital NRC No. 21-35775-01 Docket No 030-39402 - Oct 31 2025 - 9-53 AM.pdf

Good morning, Martha 😊

Can you please add the attached to ADAMS?

Thank you!
Tammy

From: Tammy Sadek <tsadekdvm@icloud.com>
Sent: Friday, October 31, 2025 9:06 AM
To: R3-DRSSMail Resource <R3-DRSSMail.Resource@nrc.gov>; Jason Kelly <Jason.Kelly@nrc.gov>
Cc: Kerry Lewis <kerrylewisdvm@gmail.com>; Nacha Rivera <drrivera@riversidecathospital.com>
Subject: [External_Sender] License amendment for US Materials License No. 21-35775-01 Docket No. 030-39402 Riverside Cat Hospital

Dear NRC and Mr Kelly:

We are requesting an amendment to our Riverside Cat Hospital NRC License No 21-35775-01 Docket No 030-39402 to add two veterinarians. Kerry Lewis, DVM and Nachamari Rivera-Rios on to the license as Authorized Users. They have completed their AU Physics training, DOT HAZMAT training, and I131 Medical AU training. Please see the appended file. Please let us know if you need any additional information or if the scanned document is unclear and you need physical copies mailed to you. Thank you.

Kind regards,

Tammy Sadek, DVM
Diplomate, ABVP Feline
Cat Hyperthyroid Radioactive Iodine Services, LLC
tsadekdvm@icloud.com