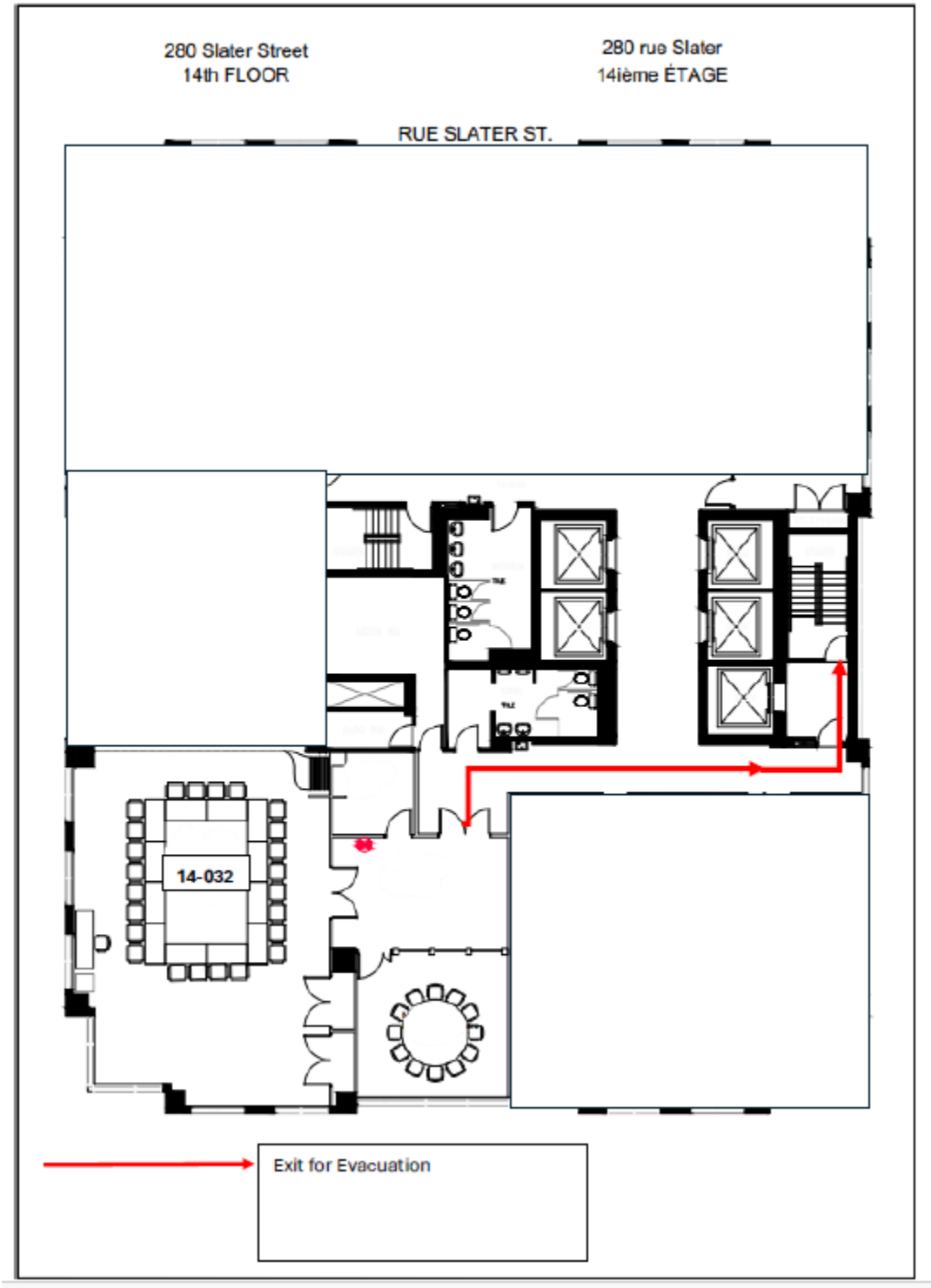
2025 SPRING INTERNATIONAL RAMP USERS' GROUP MEETING

MAY 13–16, 2025

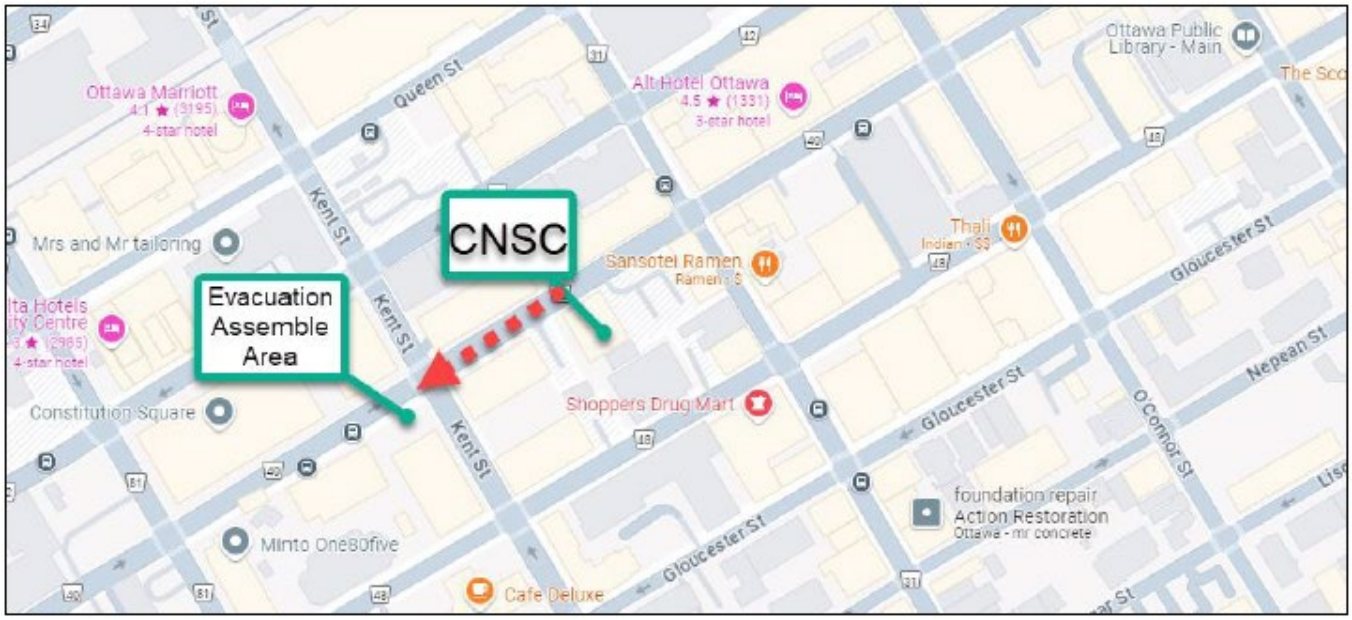
Canadian Nuclear Safety Commission (CNSC)

Ottawa, Ontario, Canada

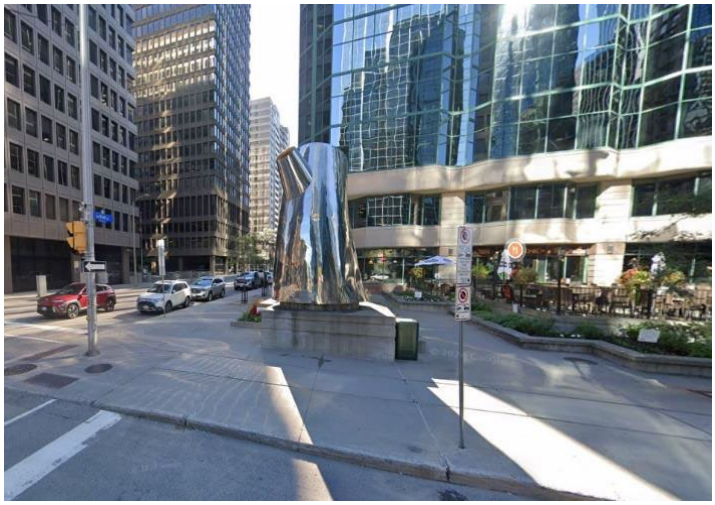
EMERGENCY EVACUATION ROUTE AND ASSEMBLY LOCATIONS



EMERGENCY EVACUATION ROUTE AND ASSEMBLY LOCATIONS (CONTINUED)



Evacuation Assembly Point



LAND ACKNOWLEDGMENT

Before we begin, we would like to acknowledge the land we are gathering on today as the traditional unceded territory of the Algonquin Anishinaabeg peoples. The Algonquin Anishinaabe have been stewards of this land for countless generations and have a deep respect for the natural world and all living beings. The teachings, stories, and traditions of the Algonquin people continue to shape and guide this land today, connecting past, present, and future generations. We recognize the enduring presence and contributions of the Algonquin Anishinaabe and all Indigenous peoples in the region.

This week, we are welcoming you on this land, whether you are from near here or far away. As we gather here, we encourage everyone to take the time to learn about the land that we are on, and to consider how you can personally contribute to reconciliation with Indigenous peoples.

As Canadian Nuclear Safety Commission (CNSC) staff, we are committed to listening actively, establishing regular dialogue, and understanding the perspectives and values put forth from our Indigenous partners. As subject matter experts, whether in environmental protection, radiation protection, or emergency response, let us recognize and respect the different types of knowledge that exist and that can overlap, intersect, complement, and inform one another. And further, let us commit to considering and reflecting Indigenous knowledge shared with us alongside regulatory information and western science in our assessments.

This land acknowledgment is a small step, but it's an important one in recognizing the truths of this land. Let us continue to reflect on our shared responsibility to protect the environment, foster equity, and build stronger, more respectful relationships with the Indigenous peoples who have always been here.

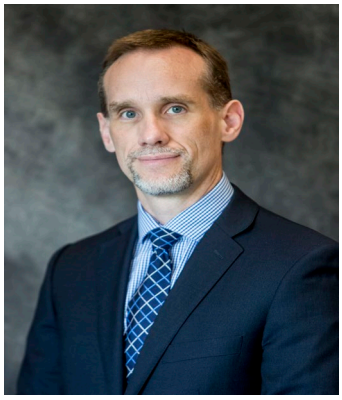
STAY INFORMED

2025 Spring International RAMP Users' Group Meeting App

Provides everything at your fingertips, from session schedules, speaker information, and venue maps, to helpful tips for navigating Ottawa's attractions, dining, and transportation. Whether attending technical sessions or exploring the city, this app will be your go-to guide for making the most of your time.

QR Code to Download Free App

WELCOME TO THE 2025 SPRING RAMP USERS' GROUP MEETING



Dean Haslip, PhD

Vice President Technical Support Branch and Chief Science Officer

Canadian Nuclear Safety Commission

Dear RAMP meeting participants,

On behalf of the CNSC, I am pleased to welcome you to the 2025 Spring International Users' Group Meeting for the Radiation Protection Computer Code Analysis and Maintenance Program (RAMP), which will take place in Ottawa May 13–16, 2025.

As Canada's full life cycle nuclear regulator, our mandate is to regulate the use of nuclear energy and materials to protect health, safety, security and the environment; to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical, and regulatory information to the public. Established in 2000 under the Nuclear Safety and Control Act, the CNSC is made up of an independent Commission supported by over 1,000 staff. The Commission is an independent administrative tribunal that makes licensing and regulatory decisions based on recommendations from CNSC staff and input from members of the public, Indigenous peoples, and other federal and provincial government departments and agencies.

Scientific information is the foundation of regulatory decision-making at the CNSC. Science is our basis for developing regulatory documents, conducting environmental and radiological assessments, and carrying out technical reviews of licensing submissions. As Chief Science Officer, it is my responsibility to ensure that CNSC staff have access to scientific expertise and that evidence-based technical advice informs the CNSC's regulatory decision-making.

In this context, we are pleased to host the 2025 International RAMP Meeting in collaboration with the United States Nuclear Regulatory Commission (U.S. NRC). This meeting will bring together scientific experts from Canada and abroad, providing a forum for technical discussions as well as training in the areas of environmental protection, radiation protection, and emergency response. CNSC staff use many of the RAMP codes in their day-to-day work and we are looking forward to strengthening our tools for implementing the CNSC's regulatory framework and protecting people and the environment.

On behalf of the CNSC, I would like to thank the U.S. NRC for providing our organization with the opportunity to host the International RAMP Meeting once again in 2025, after a successful gathering in 2018. I believe it will result in valuable training opportunities for new and experienced code users alike, and fruitful discussions among RAMP members from around the world.

I wish you all a successful and productive meeting.

WELCOME TO THE 2025 SPRING RAMP USERS' GROUP MEETING

Verena Sesin, PhD

CNSC RAMP Point of Contact

Environmental Risk Assessment Specialist

Canadian Nuclear Safety Commission

Dear RAMP meeting partcipants,

As the Canadian liaison and point of contact for RAMP, I am pleased to welcome you to the 2025 Spring International Users' Group Meeting at the CNSC in Ottawa from May 13 to 16, 2025, hosted in collaboration with the U.S. NRC.

This year marks the CNSC's 10-year anniversary of membership in RAMP. Since 2015, the program has provided our staff with access to, and training on, various codes in the areas of emergency response, radiation protection, and environmental risk assessment. Notably, the RASCAL computer code is integral to the CNSC's Emergency Operations Centre and allows for dispersion and dose assessments to inform protective actions decisions during a radiological incident. Similarly, the VARSKIN code is a core tool used by the Radiation Protection Division to calculate skin dose estimates.

Since stepping into my role as point of contact in 2022, I have had the privilege to attend several Users' Group Meetings and to collect ideas to bring back to our Canadian RAMP members. It was always front of mind for me to find new opportunities to leverage our access to the many codes under the RAMP umbrella. Over the years, the CNSC's RAMP community has grown substantially, and many staff have participated in meetings and benefited from discussions with fellow code users and developers.

When the opportunity arose to host another Users' Group Meeting in Ottawa, it was my pleasure to accept and to develop a program that provides RAMP members with a venue for discussion and learning. One highlight is the technical symposium on current issues in new and advanced reactors that will feature presentations from both Canadian and international perspectives. From receiving training on codes to seeing real-world examples of code applications, I hope this meeting will be valuable for both new and experienced users. During the session breaks, I encourage you to meet other users and enhance your network for further collaboration.

Beyond the RAMP meeting, I welcome you to explore Ottawa, Canada's capital. The city has lots to offer at this time of year, such as the Canadian Tulip Festival running May 9–19, 2025, featuring over one million tulips across city parks and along the historic Rideau Canal.

I wish you all a very successful and productive meeting, and I look forward to meeting you throughout the week.

WELCOME TO THE 2025 SPRING RAMP USERS' GROUP MEETING

John R. Tappert

(Acting) Director, Office of Nuclear Regulatory Research

Nuclear Regulatory Commission

Welcome to the RAMP Users' Meeting. We are pleased that you are joining us for this joint meeting and for collaboration to enhance nuclear and radiation safety. RAMP is one of the important initiatives through which we engage with domestic and international colleagues. The success of our regulatory program is bolstered by strong partnerships such as the RAMP users' groups.

In addition to RAMP, the Office of Nuclear Regulatory Research (RES) plans, recommends, manages, and implements applied research, confirmatory analyses, standards development, and resolution of generic safety issues for nuclear power plants and other facilities regulated by the NRC.

RES partners with other NRC offices, federal agencies, industry research organizations, international organizations, and universities to achieve our mission. We employ a wide variety of talented and diverse experts in engineering and scientific disciplines, including radiation protection, thermal-hydraulics, severe accident progression, nuclear materials, human factors and human reliability, fire protection, seismology, environmental transport, and probabilistic risk assessment. Our experts provide the technical support, analytical tools, and information necessary to accomplish NRC's nuclear safety and security mission.

The NRC is pleased to work with our colleagues at the CNSC to coordinate this User Meeting. The U.S. NRC and CNSC have a rich history of collaborative efforts, including:

- The U.S. NRC and CNSC steering committee.
- Memorandum of Understanding, which established a framework for cooperation.
- Memorandum of Cooperation to expand collaboration on advanced and small modular reactors.

Engaging with our colleagues is just one of the many ways the NRC works to ensure the safety and security of nuclear materials. These efforts are critically important as interest grows in the use of nuclear technologies. We look forward to your active participation.

MEET THE RAMP CNSC AND U.S. NRC TEAM

CNSC RAMP Team

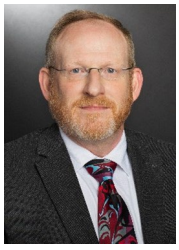
Verena Sesin
ENVIRONMENTAL RISK ASSESSMENT SPECIALIST AND CNSC RAMP POINT OF CONTACT

Courtney MacDonald
EMERGENCY MANAGEMENT PROGRAMS OFFICER

Melissa Fabian Mendoza
DIRECTOR, ENVIRONMENTAL RISK ASSESSMENT DIVISION

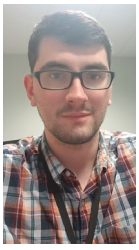
Thuy Nguyen
EMERGENCY MANAGEMENT PROGRAM SPECIALIST

U.S. NRC RAMP Team

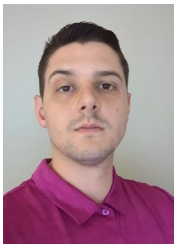


John Tomon
BRANCH CHIEF

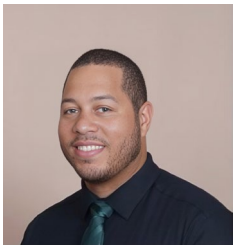
Stephanie Bush-Goddard
SENIOR RAMP PROGRAM MANAGER



Sam Edwards
RAMP TEAM

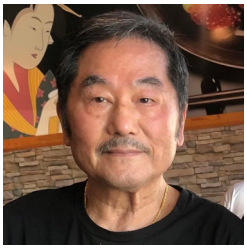


Rigel Flora
RAMP TEAM



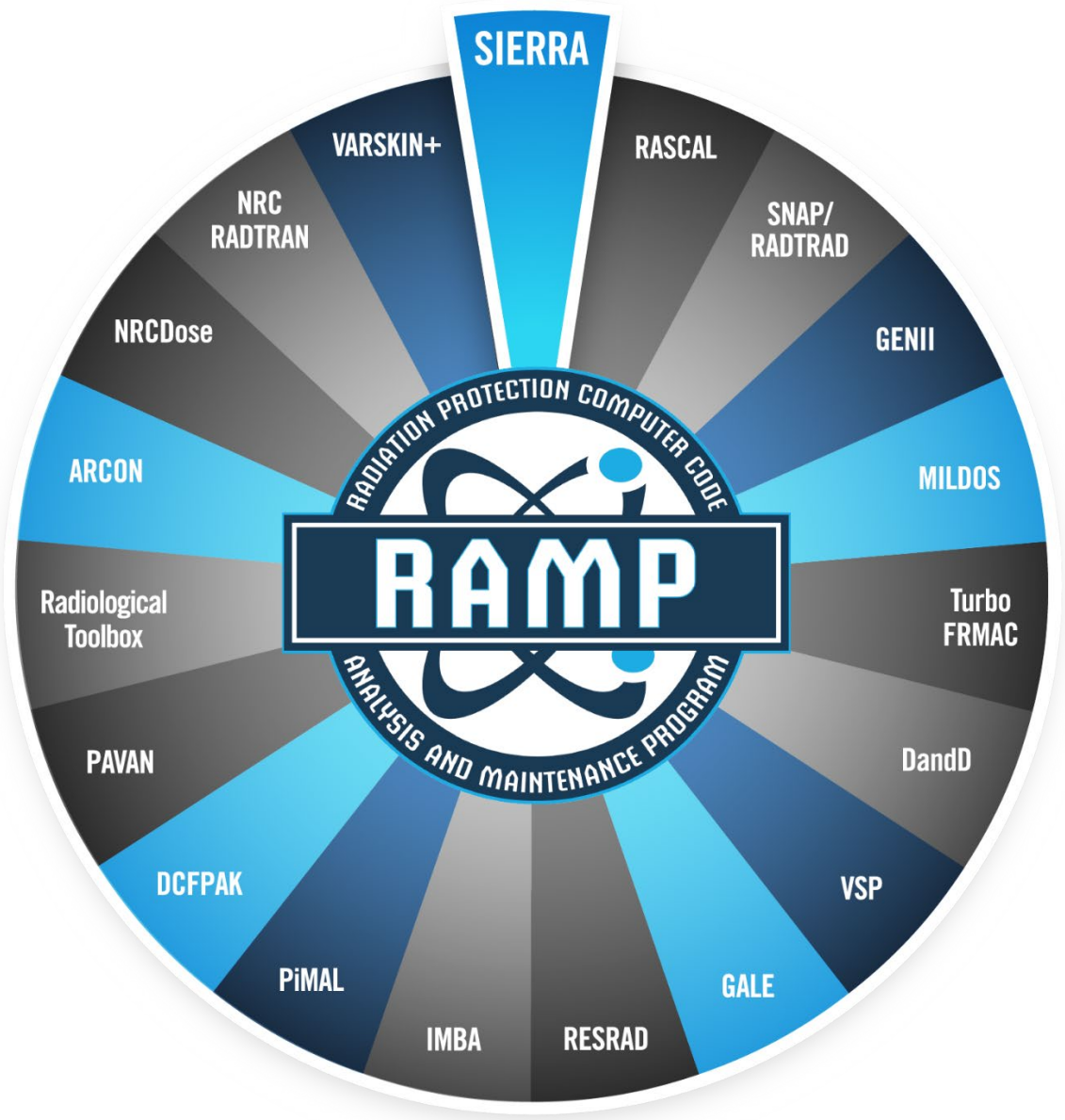
Brian Allen
RAMP TEAM

Sam Hanson
RAMP TEAM



Casper Sun
RAMP TEAM

RAMP CODES



DOSE ASSESSMENT CODES IN RAMP

https://ramp.nrc-gateway.gov/codes

SCHEDULE AT-A-GLANCE (ALL TIMES ARE IN EDT)

Day 1 | Tuesday, May 13	
9:00 AM – 9:30 AM	Registration (*1-010)*
9:30 AM – 9:40 AM	Welcome and Housekeeping (*1-010)*
9:40 AM – 9:45 AM	Land Acknowledgment (*1-010)*
9:45 AM – 9:55 AM	Welcome and Opening Remarks (*1-010)*
9:55 AM – 10:20 AM	Introduction to RAMP (*1-010)*
10:20 AM – 10:30 AM	Overview of the Week/Symposium (*1-010)*
10:30 AM – 10:45 AM	Break
10:45 AM – 11:10 AM	Canada-US Collaboration Under the Memorandum of Cooperation (MOC) (*1-010)*
11:10 AM – 11:30 AM	Overview of NRC Advanced Reactor Readiness Activities (*1-010)*
11:30 AM – 11:40 AM	Q&A and Wrap-Up (*1-010)*
11:40 AM – 12:00 PM	Group Photo (*1-010)*
12:00 PM – 1:30 PM	Lunch
1:30 PM – 2:00 PM	CNSC's SMR Readiness Project & Environmental Reviews (*1-010)*
2:00 PM – 2:30 PM	Draft New Reactor Generic Environmental Impact Statement and Proposed Rule (*1-010)*
2:30 PM – 3:00 PM	Applicability of Current Atmospheric Dispersion Models for Extreme, Persistent Cold Locations *(1-010)*
3:00 PM – 3:30 PM	Break
3:30 PM – 4:00 PM	Radiation Protection – KI Pills (*1-010)*
4:00 PM – 4:30 PM	Non-decisional Radiation Protection Remarks on Nanoparticles (*1-010)*
4:30 PM – 4:55 PM	MACCS Code Development Activities for Advanced Reactors (*1-010)*
4:55 PM – 5:00 PM	Q&A and Wrap-Up (*1-010)*
5:30 PM – 7:00 PM	Social Hour *(optional) (Manor Lounge)*

Day 2 | Wednesday, May 14		
9:00 AM – 9:30 AM	Welcome & Morning Primer: SIERRA (*1-010)*	
9:30 AM – 9:45 AM	Break	
9:45 AM – 9:55 AM	CNSC Opening Remarks *(1-010)*	
9:55 AM – 10:15 AM	Emergency Planning for Small Modular Reactors and Other New Technologies (*1-010)*	
10:15 AM – 10:35 AM	Emergency Management Collaboration Between US NRC and CNSC – Exercise Cobalt Magnet 2025 (*1-010)*	
10:35 AM – 11:30 AM	Fireside Chat: Emergency Preparedness for SMRs – Rethinking Readiness Through a Canadian Regulatory Lens (*1-010)*	
11:30 AM – 11:55 AM	Use of RASCAL in the CNSC's Emergency Operations Centre – Lessons Learned (*1-010)*	
11:55 AM – 12:00 PM	Wrap-Up	
12:00 PM – 1:30 PM	Lunch	
1:30 PM – 3:00 PM	RASCAL Beginner *(14-032)*	VARSKIN+ Beginner (*1-010)*
3:00 PM – 3:30 PM	Break	
3:30 PM – 5:00 PM	RASCAL Intermediate *(14-032)*	VARSKIN+ Intermediate (*1-010)*
5:30 PM – 7:00 PM	Dinner Outing *(optional) (OCCO Kitchen & Bar)*	

Day 3 | Thursday, May 15		
9:00 AM – 9:30 AM	Welcome & Morning Primer: NRC-RADTRAN (*1-010)*	
9:30 AM – 9:45 AM	Break	
9:45 AM – 12:00 PM	Introduction to Turbo FRMAC (*1-010)*	RESRAD-Biota *(14-032)*
12:00 PM – 1:30 PM	Lunch	
1:30 PM – 4:30 PM	IMBA Beginner/Intermediate (*1-010)*	RESRAD-Biota *(14-032)*
4:30 PM – 5:00 PM	Closing Ceremony (*1-010)*	

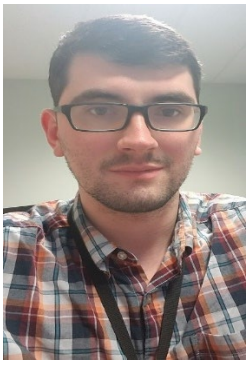
Day 4 | Friday, May 16	
9:00 AM – 11:00 AM	Code Discussion and Feedback (*1-010) (optional)*
11:00 AM – 12:00 PM	Country-to-Country Meetings (*1-010) (optional)*

SYMPOSIUM AGENDA (ALL TIMES ARE IN EDT)

Day 1 | Tuesday, May 13, 2025	
9:00 AM – 9:30 AM	Registration
9:30 AM – 9:40 AM	Welcome and Housekeeping *Verena Sesin and Courtney MacDonald, CNSC*
9:40 AM – 9:45 AM	Land Acknowledgment *Verena Sesin and Courtney MacDonald, CNSC*
9:45 AM – 9:55 AM	Welcome and Opening Remarks *Dean Haslip, CNSC*
9:55 AM – 10:20 AM	Introduction to RAMP *Stephanie Bush-Goddard, NRC*
10:20 AM – 10:30 AM	Overview of the Week/Symposium *Verena Sesin and Courtney MacDonald, CNSC*
10:30 AM – 10:45 AM	Break
10:45 AM – 11:10 AM	Canada-US Collaboration under the Memorandum or Cooperation (MOC) *Matthew Naraine, CNSC*
11:10 AM – 11:30 AM	Overview of NRC Advanced Reactor Readiness Activities *Mehdi Reisi Fard, NRC*
11:30 AM – 11:40 AM	Q&A and Wrap-Up *Brian Allen, NRC*
11:40 AM – 12:00 PM	Group Photo
12:00 PM – 1:30 PM	Lunch
1:30 PM – 2:00 PM	CNSC's SMR Readiness Project & Environmental Reviews *Tessa Henley and Ronke Ayo-Imoru, CNSC*
2:00 PM – 2:30 PM	Draft New Reactor Generic Environmental Impact Statement and Proposed Rule *Stacey Imboden, NRC*
2:30 PM – 3:00 PM	Applicability of Current Atmospheric Dispersion Models for Extreme, Persistent Cold Locations *Mike Mazaika, NRC*
3:00 PM – 3:30 PM	Break
3:30 PM – 4:00 PM	Radiation Protection – KI Pills *Todd Smith, NRC*
4:00 PM – 4:30 PM	Non-decisional Radiation Protection Remarks on Nanoparticles *Roland Benke, RCD*
4:30 PM – 4:55 PM	MACCS Code Development Activities for Advanced Reactors *AJ Nosek, NRC*
4:55 PM – 5:00 PM	Q&A and Wrap-Up *Brian Allen, NRC*
5:00 PM – 5:30 PM	Break
5:30 PM – 7:00 PM	Social Hour *(Optional)*

Day 2 | Wednesday, May 14, 2025	
9:00 AM – 9:30 AM	Welcome and Morning Primer – SIERRA *Sam Edwards, NRC*
9:30 AM – 9:45 AM	Break
9:45 AM – 9:55 AM	CNSC Opening Remarks *Thuy Nguyen, CNSC*
9:55 AM – 10:15 AM	Emergency Planning for Small Modular Reactors and Other New Technologies *Eric Schrader, NRC*
10:15 AM – 10:35 AM	Emergency Management Collaboration Between US NRC and CNSC – Exercise Cobalt Magnet 2025 *Angela Holmes and Tanya Kidd, CNSC*
10:35 AM –11:30 AM	Fireside Chat: Emergency Preparedness for SMRs – Rethinking Readiness through a Canadian Regulatory Lens *Thuy Nguyen, Richard Tennant, Melissa Fabian Mendoza, Justin Sigetich, Andrew Stewart, CNSC*
11:30 AM – 11:55 AM	Use of RASCAL in the CNSC's Emergency Operations Centre – Lessons Learned *Gaétan Latouche, Verena Sesin and Mohamed Shawkat, CNSC*
11:55 AM – 12:00 PM	Wrap-Up *Verena Sesin, CNSC*

SIERRA ATD OVERVIEW, DAY 2

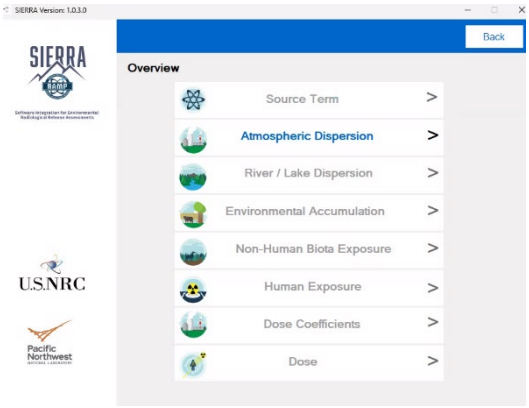


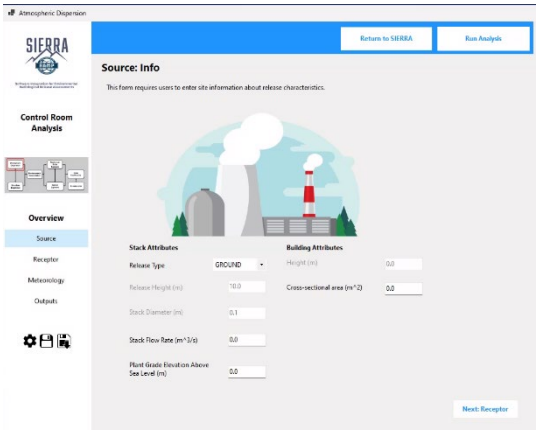
Sam Edwards

U.S. Nuclear Regulatory Commission

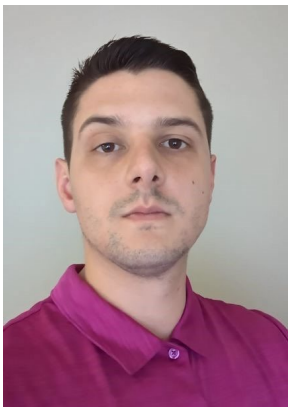
SIERRA
Software Integration for Environmental Radiological Release Assessments

The SIERRA **A**tmospheric **T**ransport and **D**iffusion (ATD) is responsible for evaluating releases in cases of design-based accidents (from 100s of meters to 10 km), as well as normal effluent releases for sensitive receptors and populations up to 80 km. This module consolidates the scientific functions of ARCON, PAVAN, and XOQDOQ into a single user interface. SIERRA ATD will allow users to estimate relative concentrations based on hourly meteorological data for all three codes, rather than use joint frequency distributions (which reduces data fidelity).





RASCAL TRAINING, DAY 2



Rigel Flora

U.S. Nuclear Regulatory Commission

The **R**adiological **A**ssessment **S**ystem for **C**onsequence **A**na**L**ysis (RASCAL) computer code is an emergency response software used to assess off-site consequences from a radiological release incident at a nuclear power plant or materials facility.

RASCAL Beginner

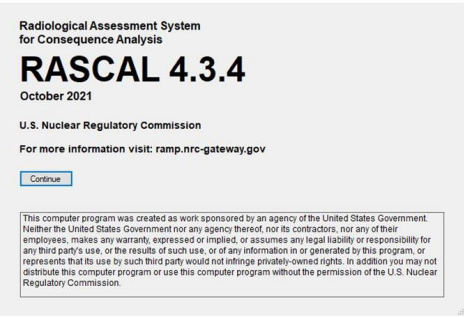
This RASCAL training course is a hands-on computer class for new RASCAL users. No experience with RASCAL is required, but a general familarity of radiological assessments will be helpful. Instructors will walk users through a step-by-step example of doing a dose assessment using RASCAL 4.3.4. Discussion topis include:

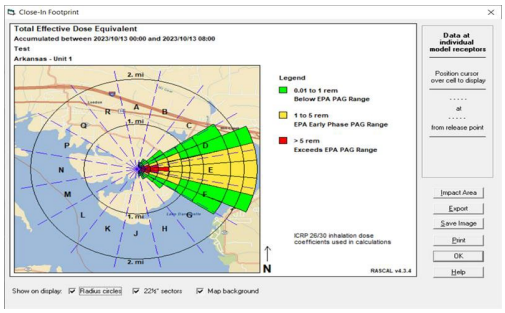
- RASCAL capabilities and tools
- Site locations
- Source term modules
- Atmospheric models
- Reading results

RASCAL Intermediate

This RASCAL training course is a hands-on computer class for intermediate and experienced RASCAL users. Experience with RASCAL is required. Instructors will walk users through a series of dose assessments, focusing on comparing models in a real-world scenario. Discussion topics include:

- Building RASCAL runs for severe accident progressions
- Core damage estimation using containment radiation monitors
- Comparing small and large break coolant accidents
- Comparing projection results to field measurements





VARSKIN+ TRAINING, DAY 2

Charlotte Rose

Renaissance Code Development

VARSKIN+ Beginner/Intermediate Training

VARSKIN+ is a multimodule application for the estimation of dose intended for use of occupational exposures. This training will focus on introducing the capabilities of VARSKIN+, with a thorough walkthrough of the graphical user interface (GUI) and all its parameters. Examples will be shown for use of the features. In addition to the basics of the application use, the trainees will be exposed to examples that highlight the capabilities of VARSKIN+, through use of the SkinDose module, with a detailed description of use cases and limitations of the module. The following is the schedule for the two trainings:

- Introduction to VARSKIN+2.1
- GUI interface
- Setting up a basic problem
- Using detailed examples to highlight the use of select parameters in SkinDose

The Evolution of VARSKIN+: Welcome to V+

Beginning in 2026, VARSKIN+ will officially be rebranded as V+, marking a significant milestone in the evolution of the software beyond its original function. Originally designed to calculate occupational skin dose from radiation exposure due to hot particles or contamination, the program has expanded substantially in recent years.

In 2021, VARSKIN was upgraded to VARSKIN+ with the addition of three advanced physics models: **wound dosimetry, neutron dosimetry, and eye dosimetry**. Building on this foundation, the integration of the Radiological Toolbox and the upcoming **Extravasation Module** has further broadened the software's scope, extending its applications beyond skin dose calculations.

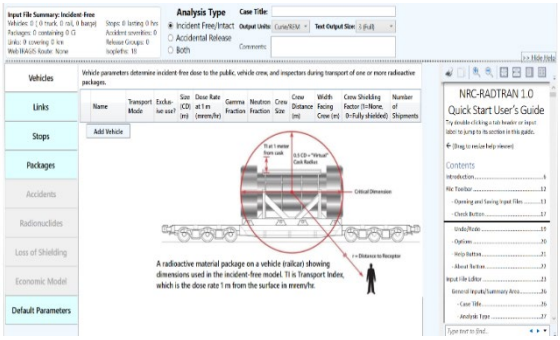
This rebranding reflects the program's transformation into a more comprehensive radiological assessment tool, reinforcing its value for professionals across multiple disciplines. The transition to V+ expansion will ensure users benefit from enhanced capabilities and a forward-thinking approach to radiation dosimetry.

NRC-RADTRAN OVERVIEW, DAY 3

Jon Napier

Pacific Northwest National Laboratory

The NRC Radioactive Material Transport (NRC-RADTRAN) computer code is used for risk and consequence analysis of radioactive material (RAM) transportation. A variety of RAM is transported annually within this country and internationally. The shipments are carried out by overland modes (mainly truck and rail), marine vessels, and aircraft. Transportation workers and persons residing near or sharing transportation links with these shipments may be exposed to radiation from RAM packages during routine transport operations; exposures may also occur as a result of accidents. Risks and consequences associated with such exposures are the focus of the NRC-RADTRAN code.



TURBO FRMAC TRAINING, DAY 3

Autumn Kalinowski
Sandia National Laboratories

The Turbo FRMAC analyis tool performs complex calculations to quickly evaluate radiological hazards during an emergency response by assessing impacts on the public, workers, and food supply. Turbo FRMAC calculations are based on methods established by the Federal Radiological Monitoring and Assessment Center (FRMAC). Turbo FRMAC can be used to evaluate the hazard from a wide variety of radiological incidents, such as:

- Radiological dispersal devices (RDDs)
- Nuclear power plant emergencies
- Fuel handling accidents
- Transportation accidents
- Nuclear detonations

RESRAD-BIOTA TRAINING, DAY 3

Charley Yu

Argonne National Laboratory

The **RESidual RADioactive (RESRAD)** family of codes are used to analyze potential human and biota radiation exposures from the environmental contamination of residual radioactive materials. The codes use pathway analysis to evaluate radiation exposure and associated risks, and to derive cleanup criteria or authorized limits for radionuclide concentrations in the contaminated medium. The RESRAD-BIOTA computer code evaluates radiation exposures of nonhuman biota in a terrestrial or aquatic ecosystem. Radiation exposures to biota in a terrestrial or aquatic ecosystem are considered to result from contaminated soil, water, and sediment, which subsequently result in contamination in air and in different food sources. A graded approach that consists of three tiers of analysis is implemented in the RESRAD-BIOTA code.

The workshop will include demonstrations of the latest version of RESRAD-BIOTA code; presentation of the methodology, models, and data used in RESRAD-BIOTA; and illustration of the graded approach using an actual site. There will also be a hands-on exercise that participants can practice using the RESRD-BIOTA code.

IMBA TRAINING, DAY 3

Charlotte Rose

Renaissance Code Development

Integrated Modules for Bioassay Analysis (IMBA) is a collection of software modules designed to calculate the amount of radiation absorbed by different tissues and organs after one has been exposed to radioactive materials, or to estimate an intake based on bioassay data. Originally designed in collaboration with regulatory agencies and radiological protection experts, IMBA plays a critical role in occupational safety and compliance with NRC and international standards.

IMBA is widely used by licensees, dosimetrists, and health physicists for dose reconstruction, exposure investigations, and routine monitoring programs. Its modular structure and advanced modeling capabilities make it a cornerstone tool in the field of internal dosimetry.

This training will guide the user through the use of the application, while showing examples that highlight the utility of the main modules. With a focus on the bidirectional nature of dose reconstruction, the trainee will, at the end of the sessions, be able to estimate dose from intakes, predict bioassay results from exposure, and predict exposure paths from bioassay results.

IMBA Beginner

- Introduction to IMBA
- Use of GUI
- Confirming EDE dose coefficients with IMBA
- Estimating dose from intake

IMBA Intermediate

- Estimating bioassay data from known or predictiable intakes
- Estimating intake from historical bioassay data:
  - Iodine exposure
  - Co-60 exposure
  - Uranium exposure

EVENING EVENTS

Social Night

Tuesday, May 13
5:30–7:00 PM

Manor Lounge
292 Elgin St, Ottawa, ON K2P 1M3

Join us for the social night to network with other RAMP members. Appetizers and access to dart lanes will be provided. No-host bar.

No-Host Dinner

Wednesday, May 14
5:30–7:00 PM

OCCO Kitchen & Bar
160 Bay St, Ottawa, ON K1R 7X8

Join us for dinner with other RAMP members. Customized, Canadian-inspired menu available that accommodates various dietary restrictions. No-host dinner and bar.

THINGS TO DO IN OTTAWA

Canadian Tulip Festival

https://tulipfestival.ca/

Parliament Hill

https://visit.parl.ca/sites/Visit/default/en_CA/

ByWard Market

https://www.byward-market.com/

Ottawa’s 7 National Museums

https://ottawatourism.ca/en/ottawa-insider/ottawas-seven-national-museums

MEAL OPTIONS

GROCERY & PHARMACY

Shoppers Drug Mart
174 Bank St

Rexall Pharmacy
240 Spark St

Farmboy Grocery
193 Metcalfe St

Slater Street Market
350 Slater St

Arum Korean Market
300 Laurier Ave

IJ's Market
380 Laurier Ave

Circle K
160 Elgin St

CAFÉ & BAKERY

Within 10-minute walk

Tim Hortons
275 Slater St

The Every Person Café
139 Bank St

Starbucks
340 Albert St

Bridgehead
344 Slater St

Café Deluxe
200 Kent St

Little Victories
209 Queen St

Bar Robo
170 Queen St

Bread & Sons
195 Bank St

Morning Owl Laurier
219 Laurier Ave

Choux Atelier
222 Queen St

Chimnies
117 Bank St

The Scone Witch
150 Elgin St

Le Moulin de Provence
150 Elgin St

LUNCH

Within 5-minute walk

Gooneys Sandwich
294 Albert St

Sansotei Ramen
153 Bank St

Toro Eats
150 Slater St

Queen St. Fare
170 Queen St

Mad Radish
116 Albert St

Mumbai Masala Gril
228 Albert St

Kimbap
121 Bank St

Izakaya Shingen
201 Bank St

3 Brasseurs – Sparks
240 Sparks St

Mr. Fez Shawarma
129 Bank St

DINNER

Within-20 minute walk

Mill Street Brew Pub
555 Wellington St

Baton Rouge Grillhouse & Bar
360 Albert St

Bier Market
156 Sparks St

Thali
136 O'Connor St

Aroma Meze
239 Nepean St

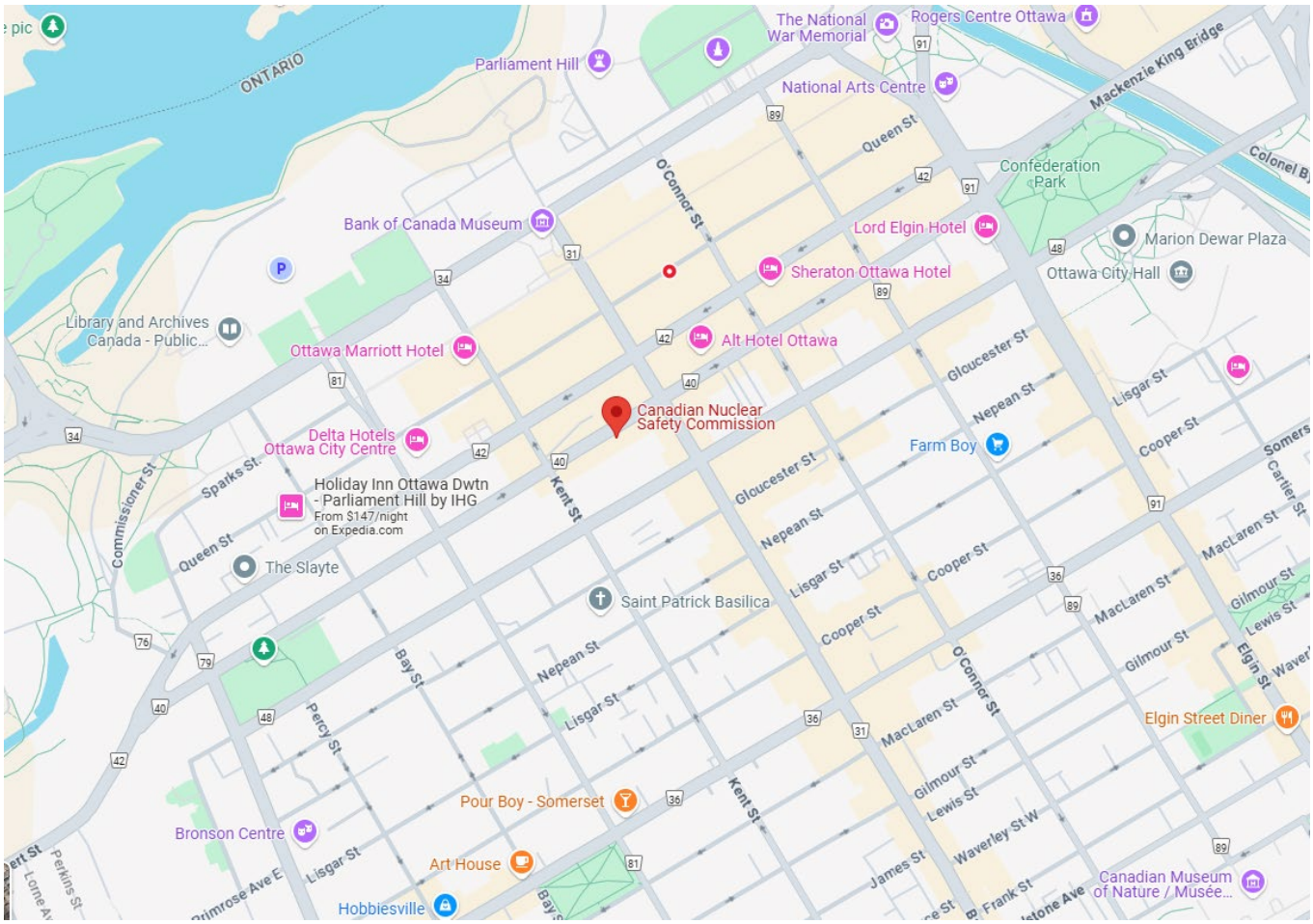
Mulligans Golf Bar
201 Queen St

Nando's PERI PERI
90 Elgin St

The Royal Oak
180 Kent St

J:unique Kitchen
381 Cooper St

Tosca Ristorante
144 O'Connor St


ONTARIO
Parliament Hill
The National War Memorial
Rogers Centre Ottawa
National Arts Centre
Mackenzie King Bridge
Queen St
Confederation Park
Bank of Canada Museum
Lord Elgin Hotel
Marion Dewar Plaza
Sheraton Ottawa Hotel
Ottawa City Hall
Library and Archives Canada - Public...
Ottawa Marriott Hotel
Alt Hotel Ottawa
Canadian Nuclear Safety Commission
Delta Hotels Ottawa City Centre
Farm Boy
Holiday Inn Ottawa Dwtn - Parliament Hill by IHG
From $147/night on Expedia.com
The Slayte
Saint Patrick Basilica
Elgin Street Diner
Pour Boy - Somerset
Bronson Centre
Art House
Hobbiesville
Canadian Museum of Nature / Musée...
Gloucester St
Nepean St
Lisgar St
Cooper St
MacLaren St
Gilmour St
Lewis St
Waverley St W
James St
Frank St
Somerset St
Cartier St
Elgin St
O'Connor St
Kent St
Bay St
Percy St
Sparks St
Commissioner St
Queen St
Primrose Ave E
Perkins St

NOTES

SEE YOU IN WASHINGTON D.C.

OCTOBER 2025

2025 Fall RAMP Users' Group Meeting

RASCAL, SNAP/RADTRAD, V+

FOR ADDITIONAL INFORMATION:
RAMP@nrc.gov
https://ramp.nrc-gateway.gov