Approved by OMB[1]
No. 3150-0183
Expires 01/31/2020

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
QUESTIONNAIRE

New York Agreement State Program

New York State Department of Environmental Conservation (DEC)

Reporting Period: March 29, 2014 through March 23, 2018

A. GENERAL

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

   The October 3, 2014 final report of the IMPEP review of New York's Agreement State Program found the overall New York Agreement State Program to be adequate to protect public health and safety, but not compatible with NRC's program. The latter finding was made because New York State is overdue in adopting required federal rules. Two recommendations were made that are specifically applicable to DEC.

   NRC recommended that the appropriate regulatory changes be made to resolve NRC-generated comments as noted on regulation review letters, and that NRC regulations be adopted in accordance with the current NRC policy on adequacy and compatibility. We recognize that New York State is overdue in adopting NRC rules, eight of which need to be adopted by DEC. Of DEC's overdue rules, four are to be incorporated into the amendment of 6 NYCRR Part 380 which is expected to be finalized in early 2018. Two others will be adopted as the new 6 NYCRR Part 384, which is expected to be submitted for executive approval in 2018. The last two overdue rules are to be incorporated into 6 NYCRR Part 381. The one open comment to DEC noted in an April 25, 2006 NRC regulatory review letter, regarding the Deliberate Misconduct Rule, will be addressed via the Part 380 amendment. While we recognize the need to adopt these regulations, the delay in doing so has not impaired DEC's ability to protect the environment or the public from radiation hazards.

[1] Estimated burden per response to comply with this voluntary collection request: 53 hours. Forward comments regarding burden estimate to the Records Management Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0183), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC also recommended that DEC implement a strategy to address current and future staffing vacancies in order to maintain program effectiveness. There are currently two vacant positions within the program. In addition, a number of radiation program staff are nearing retirement and we recognize the need for succession planning. Given the time needed for training of new staff, we recognize that DEC needs to fill our current vacancies and start training the new employee as soon as possible, and to fill future vacancies promptly. DEC management has committed to try to obtain approvals to fill the current vacancies.

B. COMMON PERFORMANCE INDICATORS

I. Technical Staffing and Training

2. Please provide the following organization charts, including names and positions:

(a) A chart showing positions from the Governor down to the Radiation Control Program Director;

See attachment 1

(b) A chart showing positions of the radiation control program, including management; and

See attachment 1

Due to a DEC reorganization effective February 1, 2018, the DEC Radiation Program moved from the Division of Environmental Remediation to the Division of Materials Management. Managers from both Divisions will meet with the NRC review team during the IMPEP review.

(c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

Not applicable

3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing & compliance, emergency response, low-level radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program. If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table headings should be:

Name	Position	Area of Effort	FTE%

See attachment 2

4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.

No new staff were hired since the previous IMPEP review.

5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.

Kenneth Martin, Environmental Radiation Specialist 1
Radiological Sites Section
West Valley Monitor, DEC Region 9 Office, Buffalo, NY
Immediate Supervisor: Patrick Concannon, Engineering Geologist & West Valley Environmental Monitor
Training Coordinated by: Pat Concannon & Timothy B. Rice, Chief, DEC Radiological Sites Section

Mr. Martin's location in western NY poses challenges for his training, because the radiation program is located at DEC's central office in Albany, while he is the only radiation staff person located in a regional office (Buffalo). He is currently up-to-date on training and is now performing field work independently, with support of more technically challenging issues from Central Office staff.

6. Identify any changes to your qualification and training procedure that occurred during the review period.

There have been no changes to our staff training requirements.

7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.

Markus Spivak, Environmental Radiation Specialist 2 in the Radiation Control Permit Section, retired in May 2015.

8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

There are two vacant Environmental Radiation Specialist 1 (ERS1) positions in the DEC radiation program. These two ERS1 positions have been vacant since November 2013 (Radiological Sites Section) and September 2016 (Radiation Control Permit Section).

9. For Agreement States, does your program have an oversight board or committee which provides direction to the program and is composed of licensees and/or members of the public? If so, please describe the procedures used to avoid any potential conflict of interest.

We do not have such a committee.

II. Status of Materials Inspection Program

10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and rationale for the difference.

Since the focus of the Part 380 permit program is on radioactive discharges to the environment, our inspection frequencies are not based on NRC Inspection Manual Chapter 2800. Instead, permit inspection frequencies are based on the magnitude of environmental discharges.

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.

During the review period, 81 Part 380 compliance inspections were conducted; 3 of those inspections were initial inspections of new permits.

12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue. At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

During the review period, no Part 380 permit compliance inspections were conducted overdue.

13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.

Currently, no Part 380 compliance inspections are overdue.

14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 1220 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

Not applicable.

III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during the reporting period?

The Part 380 inspection procedures were last updated in 2016.

16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

Inspector Supervisor Permit Category Date

2014:

INSPECTOR	SUPERVISOR	LICENSE CATEGORY	DATE
J. Abunaw	T. Rice	Water	1/14, 11/14
J. Abunaw	T. Rice	LB	1/14, 11/14
A. Gray	S. Hinkel	Air	1/14
T. Fischer	S. Hinkel	Air	1/14
M. Spivak	S. Hinkel	Air	2/14, 11/14
J. Frisone	S. Hinkel	Air	6/15, 11/14
K. Martin	T. Rice	LB	10/14

2015:

INSPECTOR	SUPERVISOR	LICENSE CATEGORY	DATE
A. Gray	S. Hinkel	Air	3/15
J. Frisone	S. Hinkel	Air	3/15, 11/15
T. Fischer	S. Hinkel	Air	5/15, 12/15
K. Martin	T. Rice	LB	6/15
J. Abunaw	T. Rice	Water	11/15
J. Abunaw	T. Rice	LB	11/15

2016:

INSPECTOR	SUPERVISOR	LICENSE CATEGORY	DATE
T. Fischer	S. Hinkel	Air	1/16, 8/16
J. Frisone	A. Gray	Air	3/16, 7/17, 12/16
K. Martin	T. Rice	LB	11/16
J. Abunaw & K. Martin	T. Rice	Water	11/16
J. Abunaw & K. Martcin	T. Rice	LB	11/16

2017:

INSPECTOR	SUPERVISOR	LICENSE CATEGORY	DATE
T. Fischer	S. Hinkel	Air	1/17, 2/17
J. Frisone	S. Hinkel	Air	1/17
A. Gray	S. Hinkel	Air	3/17
K. Martin	T. Rice	LB	6/17
J. Abunaw & K. Martin	T. Rice	LB	10/17
J. Abunaw & K. Martin	T. Rice	Water	10/17

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?

The DEC radiation program maintains a wide range of radiation detection equipment, primarily portable radiation survey meters. Our array of meters include sensitive low range exposure rate meters for conducting environmental surveys, as well as contamination detection meters. The majority of our meters are calibrated by Ludlum Instruments and MJW Technical Services. Calibration dates are tracked on an Excel spreadsheet. Instruments are routinely sent out to the calibration vendor for calibration two weeks prior to the calibration due date. All instruments that are in use are currently in calibration, or at the vendor for calibration. Sufficient calibrated instruments were available during the review period.

The Excel spreadsheet also contains information on instruments that we continue to possess, but no longer maintain in calibration. These instruments are older, and have been replaced by newer instruments that are easier to use and support. If any of those instruments need to be brought back into use, they could be calibrated within several weeks.

Also, two velometers are used periodically during Part 380 permit compliance inspections. These instruments are calibrated by TSI and Micro Precision Calibration, Inc. The calibration dates of these instruments are also tracked on the Excel spreadsheet, which will be available to the IMPEP team for review.

Additionally, through the NYS Division of Homeland Security and Emergency Services, a variety of radiological emergency response / detection and interdiction instrumentation has been purchased by the New York State Police. The DEC Division of Law Enforcement (DLE) has been assigned a cache of these instruments; the radiation program assists DLE in the upkeep of, and training on, these instruments. The radiation program has access to, and routinely uses, these instruments in performing our job duties. This cache includes personal radiation detectors, hand-held gamma spectrometers (NaI and HPGe), an ion chamber, neutron detector, and tele-probe. This equipment also includes a high-volume plastic scintillator that can be used in various configurations in emergency response or detection and interdiction roles. These systems, coupled with additional available resources consisting of a laptop, satellite receiver and several transmitters, can be remotely monitored in real time by anyone granted access. These instruments are calibrated annually. One staff member, working through an agreement with DLE, provides technical support for DLE for training, equipment, technical support, and homeland security exercises.

For sample analysis, we rely on contract lab services, or occasionally, on assistance from the NYSDOH Wadsworth Laboratory.

IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time?

At this time, 29 Part 380 Radiation Control Permits are in effect (25 air permits, 1 water permit, 1 incinerator permit, and 2 former land burial sites). Of the air permits, 10 are issued to radiopharmacies, and 9 are issued to medical isotope production cyclotrons. Also, permit applications from two new medical isotope production cyclotron facilities are expected soon.

In addition to regulating facilities that have been issued permits, DEC's Part 380 regulations also regulates all methods of radioactive discharges and radioactive waste disposals from all State-regulated radioactive materials licensees. Hence, we interface with a large number of non-permitted facilities and provide regulatory guidance and compliance oversight regarding radioactive discharges to the environment and radioactive waste disposal, conduct confirmatory inspections, and take enforcement action when needed.

19. Please identify any major, unusual, or complex licenses which were issued, received a major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

During the review period, one new, complex permit was issued, to New York University, for a medical isotope production facility for clinical use and research; some areas of the facility are licensed by the NYSDOH and other areas are licensed by the NYCDOH&MH. During the review period, two permits were discontinued (Philips Lighting and SUNY Buffalo).

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

In 2016 a variance was issued to the High Tech Manufacturing Hub at Riverbend (Riverbend) from the land disposal prohibition of Part 380-4.1(b). Riverbend was constructed on a former steel mill property. The site had been remediated under the brownfields program, but the presence of radiological contamination was unknown. Subsequent site development, TENORM containing radium-226 was identified on site, in steel production slag. A TENORM reuse workplan, Site Management Plan, and revised Environmental Easement were implemented, and the contractor modeled five exposure scenarios. The variance required that any exhumed TENORM-slag fill to be segregated from other fill materials and characterized. Any materials with Ra-226 concentrations >15 pCi/g were shipped off-site for disposal. Any material < 5 pCi/g of R-226 could be left onsite without further site restrictions. TENORM fill between 5 and 15 pCi/g was consolidated in a defined area of the site, laid down in 6' layers and scanned and bias samples collected. The laydown area was then covered with 1' of clean fill and paved for use as a parking lot.

Two types of Part 381 exemptions were issued during the review period, granting transporters of low-level radioactive waste (LLRW) permission to transport without a Part 381 LLRW Transporter Permit.

The first type of exemption is outlined in 6 NYCRR Part 381.5(e) and allows exemptions to be granted to persons transporting LLRW under certain conditions. These conditions require the transporter to be a licensee of the NRC, NYSDOH or the NYCDOH; the waste to be transported has to be Class A waste as defined by the NRC; the transport must occur between premises which are controlled by the licensee and the material is transported by a vehicle which is owned by the licensee; and the total activity contained in a single shipment does not exceed A2/100 where A2 is the activity defined in 49 CFR 173.435. We issued exemptions of this kind to five facilities: the New York State Department of Health's Wadsworth Laboratories, Buffalo University, Cornell University, Rensselaer Polytechnic Institute, and Syracuse University. These exemptions are renewed on a biannual basis.

The second type of exemption is the USDOT Special Permit (SP) 11406 which is issued under the authority of the Conference of Radiation Control Program Directors. These special permits are issued to waste haulers who have unidentified LLRW aboard a truck or trailer that is to be returned to its place of origin for identification and decay, or removal from the load if applicable. The majority of these permits are issued at waste disposal facilities when a trash or recycling truck sets off a radiation alarm. In most cases the offending material is household waste containing bodily fluids contaminated with residual short-lived isotopes administered for a medical procedure (e.g., I-131 or Tc-99m). Occasionally, the offending material has been of other origin (e.g., an old radium dial or other scrap metal material). Recently, alarms from waste loads containing TENORM have been increasing. Waste transfer stations that requested a DOT-11406 during the review period included: Wheelabrator Hudson Falls, IWS Goshen Transfer Station, Covanta Babylon (waste to energy facility), and Covanta Niagara Falls (waste to energy facility). Note: USDOT (SP) 10656 permits are now only issued by the NYSDOH, as these special permits apply almost exclusively to licensed or licensable materials; it is therefore more appropriate for such exemptions to be issued by the radioactive materials licensing agency.

21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?

Several of the Part 380 Radiation Control Permit program's application guidance documents (used by permit applicants) and internal application review and processing procedures (used by staff) were created and updated during the review period.

The following guidance documents were updated: *Part 380 Permit Application Guide for Discharge of Radioactive Materials in Effluents to Air* was updated in 2017, and the guide *Demonstrating Compliance with the Public Dose Limits* was updated in 2015.

Documents and procedures used by staff when reviewing permit applications and processing permits were updated as follows: *Part 380 Permit Processing Procedures* were updated in 2016, and *Permit Application Review Checklists* and *Effluent Calculation Forms* were updated in 2017. Two new procedures, *How to Treat Multiple Stacks as a Single Emission Point* and *Why Emissions Meeting Table II Concentrations at the Stack Also Meet the 10 mrem Dose Constraint* were issued in 2016.

A new program policy, "DER 39 - Management of Soils and Fill Contaminated with Processed and Concentrated Naturally Occurring Radioactive Materials," is intended to establish an evaluation process and implementation criteria for DEC staff when addressing sites where historic TENORM fill is identified. This policy document is in draft form at this time, waiting for input from Counsel's Office.

Copies of all the above documents will be made available to the IMPEP review team for review.

22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

During the review period, no Part 380 discharge permit renewal applications have been pending for over a year. However, a Part 380 monitoring and maintenance permit (a substantive permit pursuant to a Consent Order) for the Cornell Radiation Disposal Area (a former LLRW burial suite) has been under development for many years.

V. Technical Quality of Incident and Allegation Activities

23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

Licensee Name	License #	Date of Incident/Report	Type of Incident

On this issue, DEC defers to the radioactive materials licensing agencies in the State. Nonetheless, DEC did not have any incidents or allegations that met the criteria for reportable incidents per SA-300.

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

There were no changes. NRC's updated SA-300 procedures were reviewed, and all incidents and allegations reported to the radiation program were evaluated and compared to the updated SA-300 reporting requirements.

However, we are developing a new procedure for addressing Radiological Incidents and Allegations, to formalize how SA-300 is implemented by DEC.

As always, the licensing agencies are informed of all incidents and allegations with the potential to involve regulated radioactive material. The majority of events brought to the attention of the DEC do not involve licensed material. The allegations we receive typically refer to possible environmental contamination by radioactive materials, and we respond to them on a case-by-case basis, usually with a site visit and survey. A list of incidents and allegations received during the review period, and the resolution thereof, will be made available to the IMPEP team for review.

C. NON-COMMON PERFORMANCE INDICATORS

I. Compatibility Requirements

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

Environmental Conservation Law Articles 1, 3, 17, 19, 29, and 37

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

Our regulations are not subject to a "sunset" provision.

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

A number of overdue NRC rules will soon be adopted into the Part 380 amendment (RATS 1995-5, 1998-1, 2007-3, and 2008-1, along with 1991-4, 1997-1, and 1998-1). The proposed amendment to Part 380 has been reviewed by NRC; we do not agree with all of NRC's comments, and will present our position when submitting the final rule to NRC. We expect to file the final amendment to Part 380 very soon.

RATS 1994-3 (Timeliness of Decommissioning) and RATS 1997-6 (License Termination Rule) will be adopted via the new Part 384. The proposed new Part 384 has not yet been forwarded to executive for approval. We hope to obtain executive approval and file the proposed rule in 2018 through our new Division.

No action has yet been taken regarding RATS 2012-2, 2012-3, and 2015-3, which will be incorporated into Part 381.

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

A proposed rule must receive executive approval within the agency and from the Governor's office, prior to filing with the Department of State. After the proposed rule has been filed, timeframes are dictated by the State Administrative Procedures Act. After the public comment period has ended, public hearings have been held, and responses to public comments and the final rule has been prepared, the final rule can then be filed.

II. Sealed Source and Device (SS&D) Evaluation Program **– not applicable**

29. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

III. Low-level Radioactive Waste Disposal Program

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

Our LLRW disposal program is essentially in abeyance, except for the Part 381 LLRW Transporter Permit program. Although our Part 382 and Part 383 regulations are still in effect, we have no active LLRW disposal sites.

We continue to regulate and monitor two inactive radioactive waste burial sites: The Cornell Radiation Disposal Site (RDS) and the West Valley State-licensed Disposal Area (SDA).

The Cornell RDS is formally closed and is currently controlled under a Consent Order. The RDS closure continues to be in compliance with the conditions of the Order. Additionally, the RDS is inspected annually for compliance with the conditions of the Order and Part 380. A Part 380 monitoring and maintenance permit (a substantive permit pursuant to the Order) has been under development for many years. At this time the only ongoing active Order requirement – groundwater monitoring and periodic pump and treat for paradioxane – appears to be nearing completion. A substantive Part 380 permit will be in place before the end of active management under the Order.

The West Valley State-licensed Disposal Area (SDA) is in interim closure status for Part 380 and RCRA, and is controlled under a Part 380 monitoring and maintenance permit. (The SDA is also regulated under a NYSDOH radioactive material license.) As part of the joint federal / state NEPA / SEQRA remediation and closure process for the entire site, NYSERDA will be proposing a final closure option for the SDA.

We currently have an ERS1 assigned to each of these sites (under the direct supervision of an ERS3 to evaluate these sites for compliance with their permits and other applicable regulatory requirements. Following an anticipated retirement, responsibility for both of these former burial sites will be consolidated under one ERS1. To prepare for this change, the ERS1 responsible for the SDA has been participating in the RDS inspections to become familiar with the site.

IV. Uranium Recovery Program **– not applicable**

Attachment 2

Name	Position	Area of Effort Agreement Work	FTE (%)	Area of Effort Non-agreement Work	FTE (%)
Sandra Hinkel	Environmental Radiation Specialist (ERS) 3	administration	20		
		permitting & compliance	80		
Ann Marie Gray	ERS 2	permitting & compliance	95		
		emergency response	5		
VACANT	ERS 1	permitting & compliance	95		
		emergency response	5		
John Frisone	ERS 1	permitting & compliance	95		
		emergency response	5		
Tiffany Fischer	ERS 2	permitting & compliance	95		
		emergency response	5		
Timothy Rice	ERS 3	administration	5	administration	15
		permitting & compliance	5	contaminated sites	35
		emergency response	10	emergency response	5
		contaminated sites	20	Marcellus	5
John Mitchell	ERS 2	emergency response	5	contaminated sites	60
		contaminated sites	30	national issues committees	5
Tom Papura	ERS 2	emergency response	5	contaminated sites	65
				emergency response	5
		contaminated sites	15	homeland security	5
				Marcellus	5
John Abunaw	ERS 1	emergency response	5	contaminated sites	35
		contaminated sites	10	radiation monitoring at RMW & SW facilities	50
Jerry Riggi	ERS 1	emergency response	5	contaminated sites	55
		contaminated sites	15	emergency response	5
				homeland security	20
VACANT	ERS 1	permitting & compliance	40	contaminated sites	15
		emergency response	5	emergency response	5
		contaminated sites	35		
Jessie Sangster	EPS 1	transportation of LLRW	80		
		regulatory development	20		

New York State Department of Environmental Conservation
Radiation Control Permit Section
625 Broadway, Albany, New York 12233-7255
Phone: (518) 402-9625 • **Fax:** (518) 402-9627
Website: www.dec.ny.gov

Overview of 6 NYCRR Part 380, "Rules and Regulations for Prevention and Control of Environmental Pollution by Radioactive Materials," and the Part 380 Permit Program

1. What Does Part 380 Regulate?

- State-regulated (non-federal) radioactive material (RAM)
- Environmental discharges of RAM
- Disposal of regulated radioactive waste

2. Part 380 Radiation Control Permits Issued for:

- Emission of RAM to Air - when >10% Table II effluent concentrations
- Discharge of RAM to Water - when not connected to municipal sanitary sewer system
- Incineration – to burn and emit RAM
- Environmental Studies – for use and release of RAM in the environment
- Old Land Burial Sites – to require monitoring and maintenance

3. Types of Facilities Currently Issued Part 380 Permits:

- radiopharmacies
- cyclotrons
- research & development
- industrial
- former land burial sites
- incinerator

4. The Part 380 Permit Application Review Process – Determines the Following:

- Is the proposed discharge necessary?
- Will proposed operations comply with Part 380?
- What is the requested annual activity to be discharged (needed to set permit limits)?
- What is the average annual concentration of the effluent (needed to calculate dose to public)?
- Is the discharge ALARA? Will adequate effluent treatment be used, if technically feasible?
- Is the ventilation system adequate - sufficient stack height, effluent flow rate?
- Is the effluent monitoring system appropriate for level of discharge requested?
- Will public dose limits be met? 100 mrem/yr & 10 mrem/yr constraint for emissions

5. Part 380 Radiation Control Permits

- Specifies nature of authorized discharge and annual discharge limits
- Requires reporting exceedance of permit limits & annual discharge report
- Includes details of discharge and monitoring system parameters, performance standards, maintenance, calibrations, and data review; requires all submitted procedures to be followed

6. Part 380 Permit Compliance Inspections

- Generally unannounced
- Conducted every 1-4 years, based on magnitude of discharges and compliance history
- Inspectors observe operations, visually inspect equipment, interview staff, review procedures & records of discharges and stack monitor calibrations, and take confirmatory measurements
- Violations – Notice of Violation issued, corrective action always required to resolve
- Enforcement action - considered when violations identified, in accordance with DEC policies
- Consent Order - requires facility to implement corrective actions to correct violation within specific time frame, and includes payable fine as set in Environmental Conservation Law
- Licensing agency notified of any issues of mutual interest.

7. Facility Responsibilities

- All licensed facilities are responsible for evaluating environmental discharges of RAM and for determining if a Part 380 permit is required.
- Even if a permit is not required, Part 380 requires all radioactive discharges to be tracked.
- Facilities apply for the RAM license and Part 380 permit simultaneously.

8. DEC Interactions with RAM Licensing Agencies

- Licensing agencies refer applicants for new or amended licenses to DEC when proposed operations could result in environmental discharges, to determine if a Radiation Control Permit is required (e.g., radiochemistry work, use of radioactive gasses, radioiodines, etc.).
- During licensing actions and inspections, licensing agencies confirm if the facility has obtained a DEC Part 380 permit, or a letter from DEC confirming that no permit is required.
- Frequent consultation between agencies regarding new applicants and proposed operations.

9. Elements of DEC's Part 380 Permit Program

- Permit application reviews and compliance inspections performed by Radiation Control Permit Section staff (Section Chief and three Environmental Radiation Specialists – in Albany).
- Former burial sites managed by Radiological Sites Section staff (Albany and Buffalo).