

---

# ***RCRA Overview and Permitting Process***

**Department of Energy  
Idaho Operations Office  
March 13, 2013**

**Presented by: Nicole Brooks**



***EM*** *Environmental Management*

## Resource Conservation and Recovery Act (RCRA)

- Enacted in 1976
- Amended in 1984
- RCRA is a law, a set of regulations, and a regulatory program for the management of waste.



***EM*** *Environmental Management*

## Congress outlined three major programs in RCRA

- **Solid Waste** – focuses on traditional nonhazardous solid waste such as municipal garbage; **Subtitle D**
- **Underground Storage Tanks** – added to RCRA in 1984, the UST standards established design and operating requirements to prevent leaks from underground tanks; **Subtitle I**
- **Hazardous Waste** – developed to ensure the safe management of hazardous waste from the moment it is generated to its final disposal (and beyond); **Subtitle C**



## *RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management*

- ***Who is the regulated community?***
  - ***Generators*** – “persons whose act first creates or produces a hazardous waste”
  - ***Transporters*** – “persons engaged in the off-site transportation of hazardous waste”
  - ***Treatment Storage Disposal Facilities*** – “facilities engaged in the treatment, storage, or disposal of hazardous waste”



## *RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management (cont'd)*

---

- ***Who is the regulator?***

- EPA authorized the State of Idaho Department of Environmental Quality (DEQ) the authority to implement its own hazardous waste program in 1990
- The Idaho Hazardous Waste Management Act (HWMA) must be substantially equivalent to, consistent with, and no less stringent than the federal RCRA program
- DEQ is the regulating and enforcement agency for RCRA/HWMA in Idaho



## *RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management (cont'd)*

---

- *What is regulated?*
  - The term **hazardous waste** means “a solid waste...which because of its concentration or characteristics may...pose a substantial or potential hazard to human health or the environment...”
  - Mixed waste – waste that contains both radioactive and hazardous waste constituents



## *RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management (cont'd)*

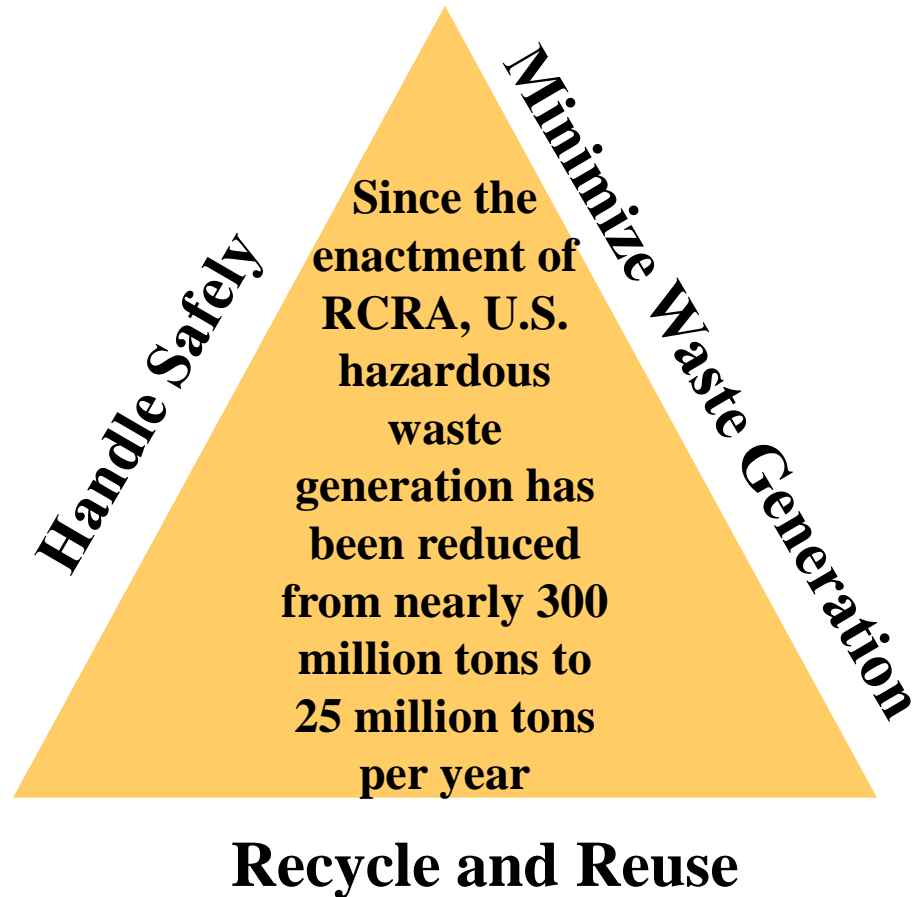
- *How is hazardous waste regulated?*
  - Permits
  - Reporting requirements
  - Closure requirements
  - Compliance schedules
  - Enforcement



## *RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management (cont'd)*

---

- *Why regulate hazardous waste?*



**EM** *Environmental Management*



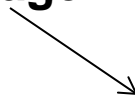
# *RCRA Subtitle C Manages Waste Cradle-to-Grave*

RCRA requirements attach at the point of generation to disposal

## Generation



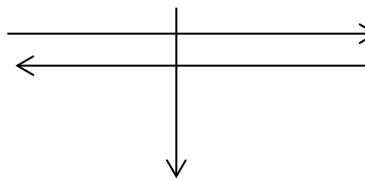
## Storage



## Disposal



## Treatment



## Transportation



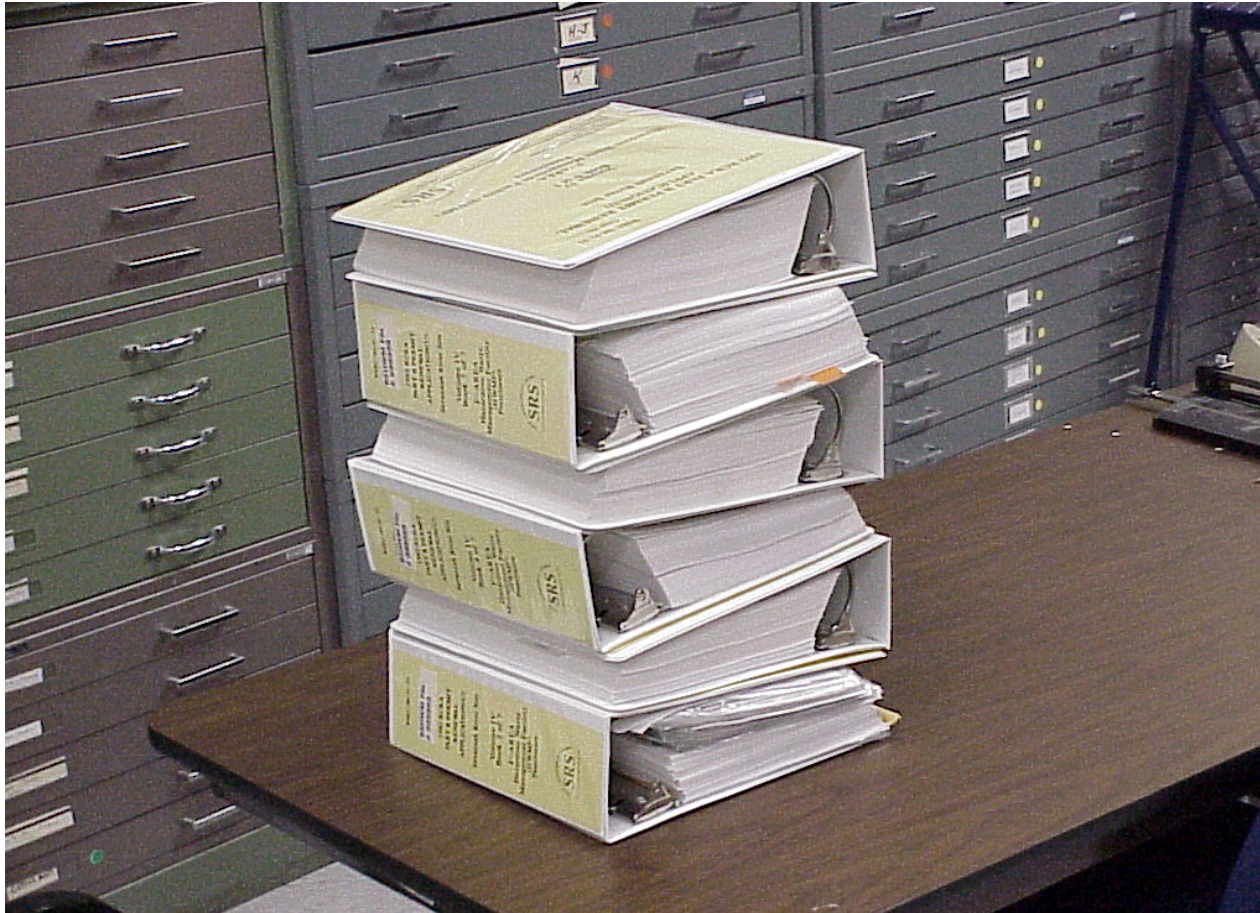
## RCRA Permit Required for TSD Facilities

- ***Treatment facility*** – uses processes to alter the character or composition of waste
- ***Storage facility*** – temporarily hold waste until treated or sent for disposal
- ***Disposal facility*** – facility designed to permanently contain waste



# *RCRA Permit Application*

---



***EM*** *Environmental Management*

## RCRA Part A Permit Application

- RCRA Part A Permit Application is the first step in the permitting process
  - Consists of general information such as name of facility, location, descriptions of TSD processes, design capacity, types of hazardous wastes managed at facility, topographic map of facility
  - Once the Part A Application is approved, the facility is considered operational under “Interim Status” until the Part B Application is approved



## RCRA Part B Permit Application Requirements

- Part B Application requires much more detailed and specific information
  - Part A and facility description information
  - Waste analysis plan
  - Process description
  - Procedures to prevent hazards
  - Contingency plan
  - Personnel training
  - Inspection Schedules
  - Security
  - Closure and post closure requirements
  - Engineering Certification





## *RCRA Part A and Part B Permits at INL*

---

- RCRA “Part A Permit”
  - 2 units remaining in Interim Status and are regulated under the RCRA Interim Status requirements
    - INTEC Tank Farm Facility WM-187, WM-188, WM-189 and WM-190
    - Transuranic Storage Area and Retrieval Enclosure (AMWTP)
- RCRA “Part B Permit”
  - “Part B Permit” currently consisting of 9 individual volumes
    - Each volume contains multiple hazardous waste management units



## *Current INL RCRA Part B Permits*

---

- Volume 14- INTEC Liquid Waste Management Permit
- Volume 18- INTEC Storage and Treatment
- Volume 21-Post Closure Permit for units closed as landfills
- Volume 22-Calcine Solids Storage Facility Permit
- Volume 23-Calcine Treatment Permit Application
- MFC Consolidated Permit
- MFC – EBR-II Permit
- MFC Sodium Processing Facility Permit
- AMWTP Permit

INL RCRA Work Plan details all units in each permit



**EM** *Environmental Management*

## *Brief History of RCRA Permitting at INL*

---

### **Part A Permit Application Timeline:**

- 1980 – INL submitted original Part A Permit application to EPA included *hazardous waste units only*
- 1988 – EPA published a clarification notice in the Federal Register that *radioactive mixed waste* management units in existence on or before July 3, 1986 may be granted Interim Status if the RCRA Part A Permit application was submitted to EPA by March 23, 1989
- 1989 – On March 23, 1989 INL submitted a revised Part A Permit Application to the EPA which included *all hazardous waste units and all radioactive mixed waste* units at the INL
- 1990 – The State of Idaho DEQ was authorized by EPA to implement the RCRA program
- 1990 – INL submitted a revised Part A Permit to DEQ which was approved in 1991 thereby granting Interim Status to all units listed in 1990 Part A Application





## Brief History of RCRA Permitting at INL (con't)

### **Part B Application Timeline:**

- 1985 – INL submitted original Part B Permit application to EPA included *hazardous waste units only*
- 1985-1987 – INL revised the Part B Application several times in response to Notice of Deficiencies issued by EPA
- 1988 – EPA determination that RCRA applied to radioactive mixed wastes too
- 1989 – INL submitted revised Part A application, however, due to the number of additional units subject to regulation, more time was needed to revise Part B applications to incorporate additional units
  - EPA/DEQ had not yet established a schedule for completion of Part B Applications for radioactive mixed waste units
  - INL developed the INL RCRA Work Plan which served as a schedule for completion and submittal of Part B Applications
- 1990 – present – INL has worked with DEQ and EPA to obtain Part B Permits for all but 2 operating RCRA units (Tank Farm and TSA-RE are Interim Status)



# *Public Notification and Participation Opportunities*

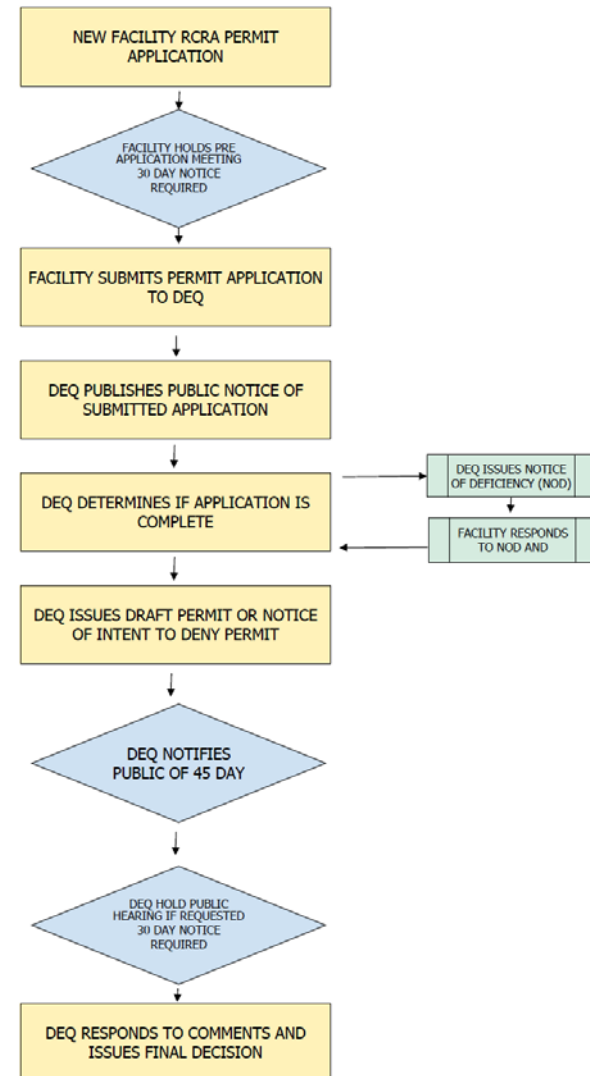
---

RCRA requires permitting authority (DEQ) and facility being permitted (DOE and contractors) to provide public notification and participation opportunities during the permitting and permit modification process



# Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- Major Steps for New Facility RCRA Permit Application



## *Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process*

- RCRA Permit Modification Requests (PMRs)
  - Most of the current INL RCRA permitting activity is for changes or modifications to existing RCRA Permits
  - Three “classes” or types of PMRs
  - Public notification and participation for PMRs is different than for new permit applications and varies depending on the class of PMR



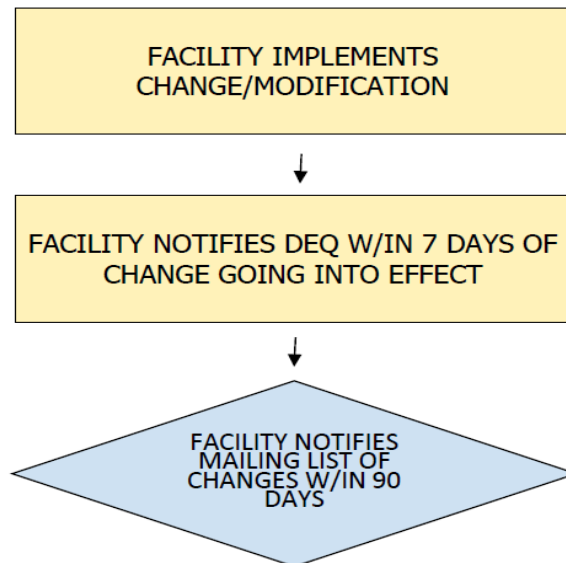
# *Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process*

- Class 1 PMR
  - Address routine and administrative changes that *do not substantively alter the conditions in the permit*
  - Examples include administrative changes, changes in facility contacts
  - Most Class 1 PMR's do not require DEQ approval before they are implemented
  - Class 1 PMR's that require director approval have no set timeframes for DEQ to make determination, however, Facility can elect to follow Class 2 process



# Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- Major Steps for Class 1 PMR



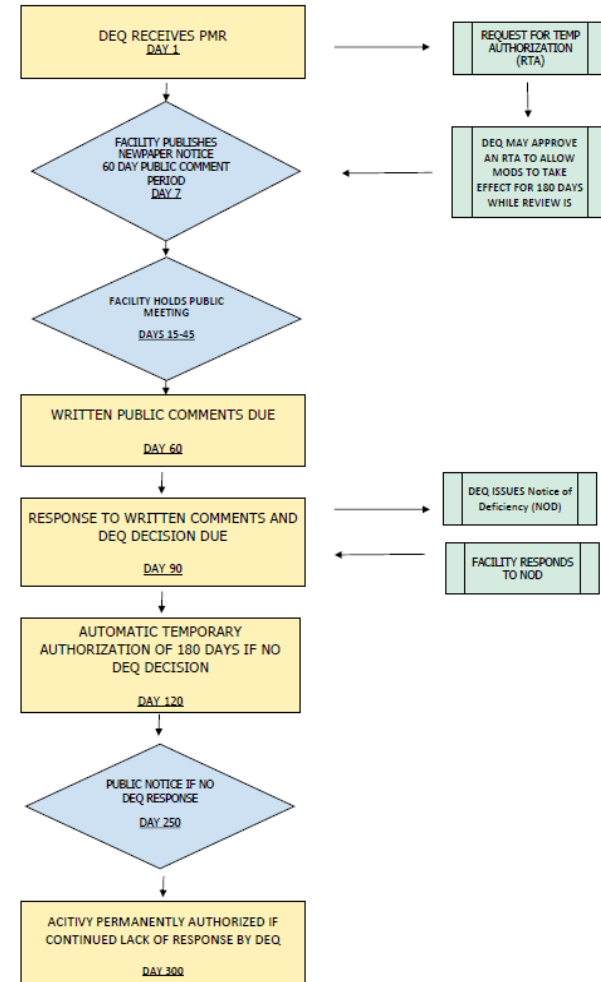
## Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- Class 2 PMR
  - Address changes that *do not substantively alter the facility's design or the management practices prescribed by the permit*
  - Examples include changes in inspection schedule or emergency procedures, changes in training plan that increase or decrease the amount of training given to employees, types and/or quantities of wastes managed
  - Class 2 PMRs require DEQ approval
  - Facility can request a Temporary Authorization (RTA) to allow change to go into effect while the review is in process. The RTA is good for 180 days



# *Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process*

- Major Steps for Class 2 PMR





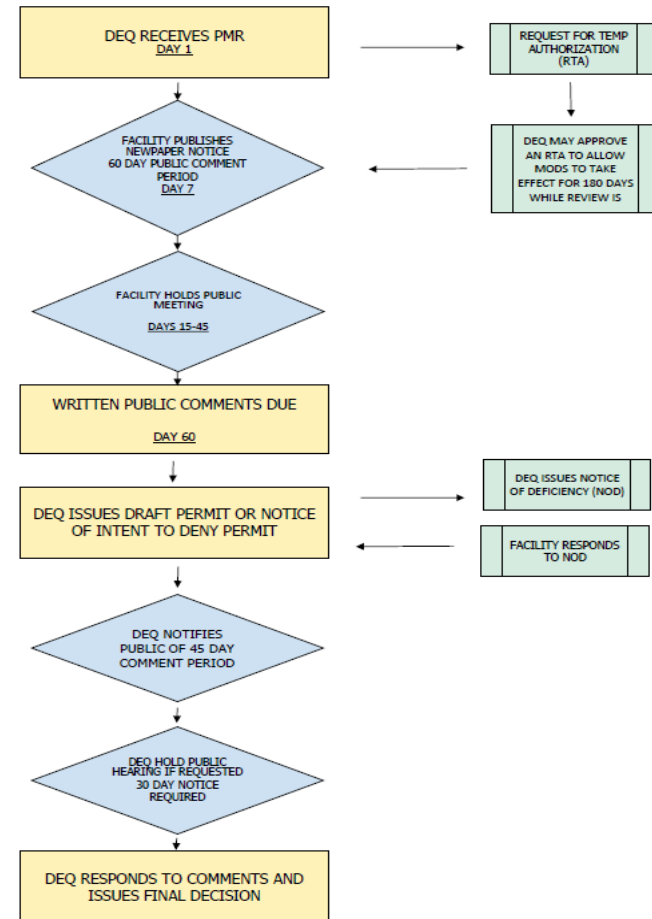
## *Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process*

- Class 3 PMR
  - Address changes that are *significant modifications* to the facility such as the addition of new units, significant increases in waste volumes managed, changes that substantively alter the facility design or conditions of operations
  - Class 3 PMR's require DEQ approval
  - Facility may request an RTA



# Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- Major Steps for Class 3 PMR



## *Useful Online Resources*

---

- INL RCRA Work Plan
  - WorkPlan[https://idahocleanupproject.com/Portals/0/documents/FINAL\\_WORK\\_PLAN-Rev\\_2-12-12.pdf](https://idahocleanupproject.com/Portals/0/documents/FINAL_WORK_PLAN-Rev_2-12-12.pdf)
- RCRA Online
  - <http://www.epa.gov/epawaste/inforesources/online/index.htm>
- DEQ Link to INL Permits
  - <http://www.deq.idaho.gov/permitting/issued-permits.aspx>

