
RCRA Overview and Permitting Process

**Department of Energy
Idaho Operations Office
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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.



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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



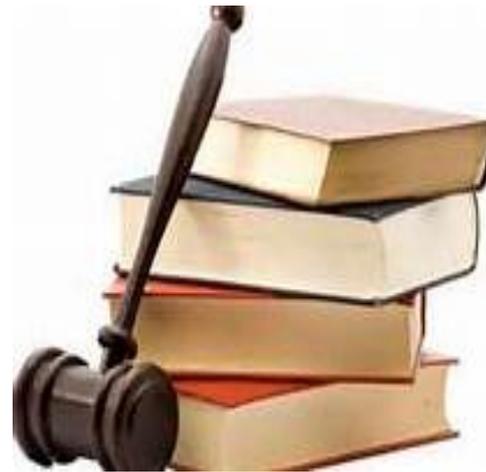
RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management (cont'd)

- *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



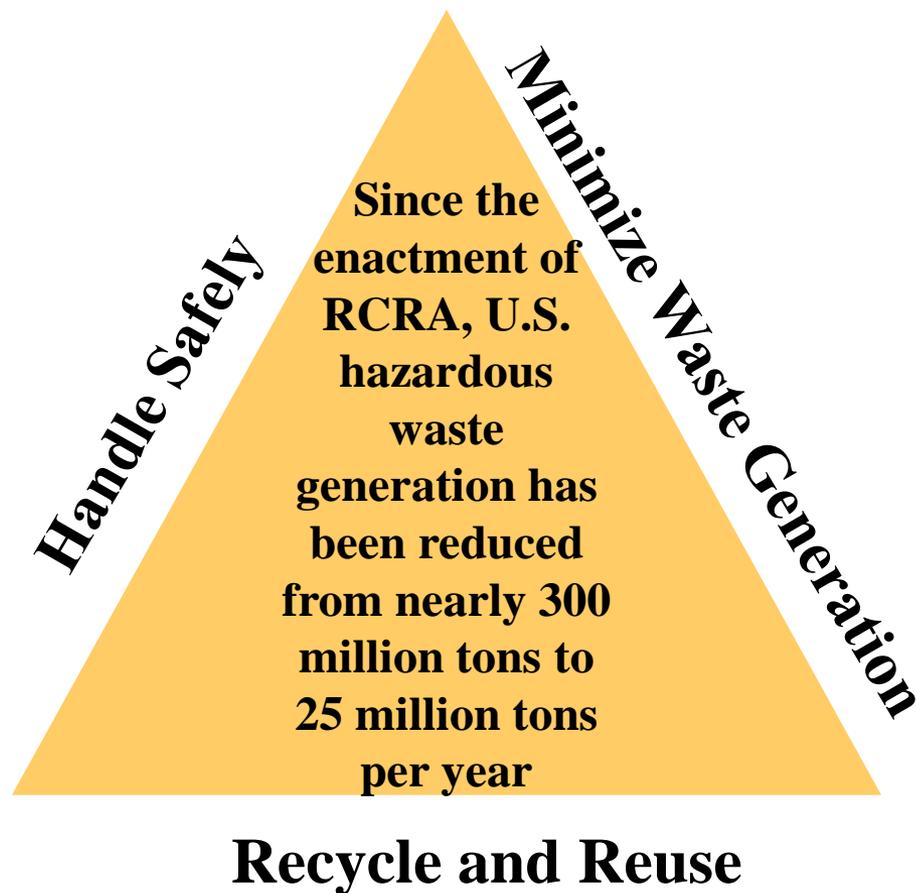
RCRA Subtitle C Defines the Who, What, Why and How of Hazardous Waste Management (cont'd)

- *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?*

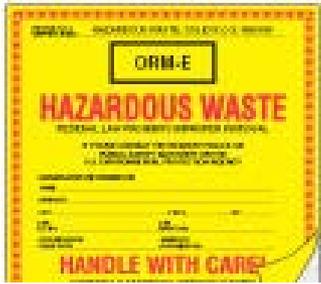


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RCRA Subtitle C Manages Waste Cradle-to-Grave

RCRA requirements attach at the point of generation to disposal

Generation



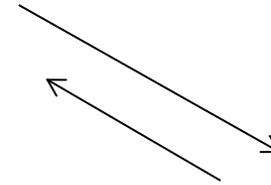
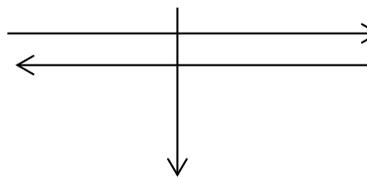
Storage



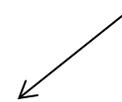
Disposal



Treatment



Transportation



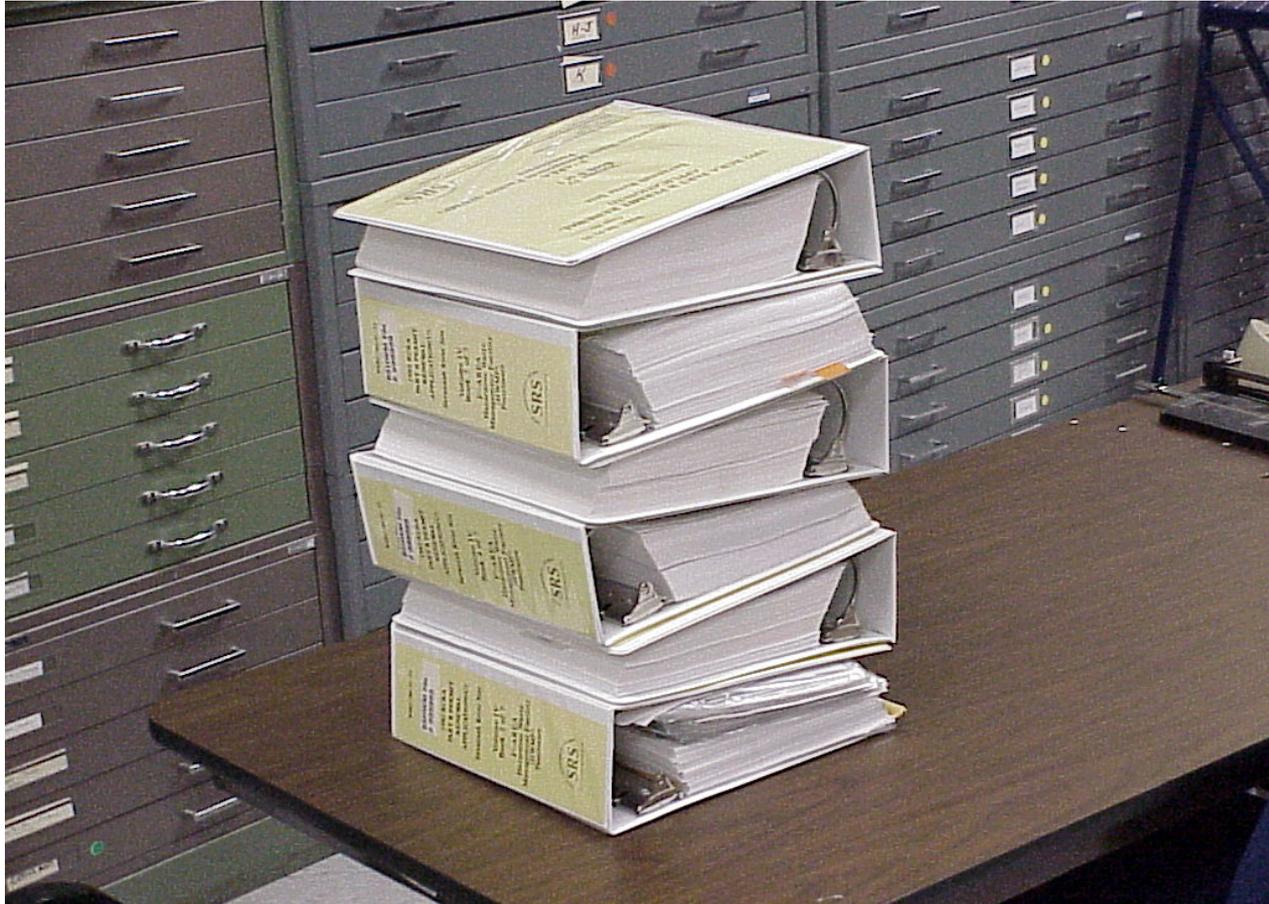
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RCRA Permit Required for TSD Facilities

- ***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



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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



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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



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)



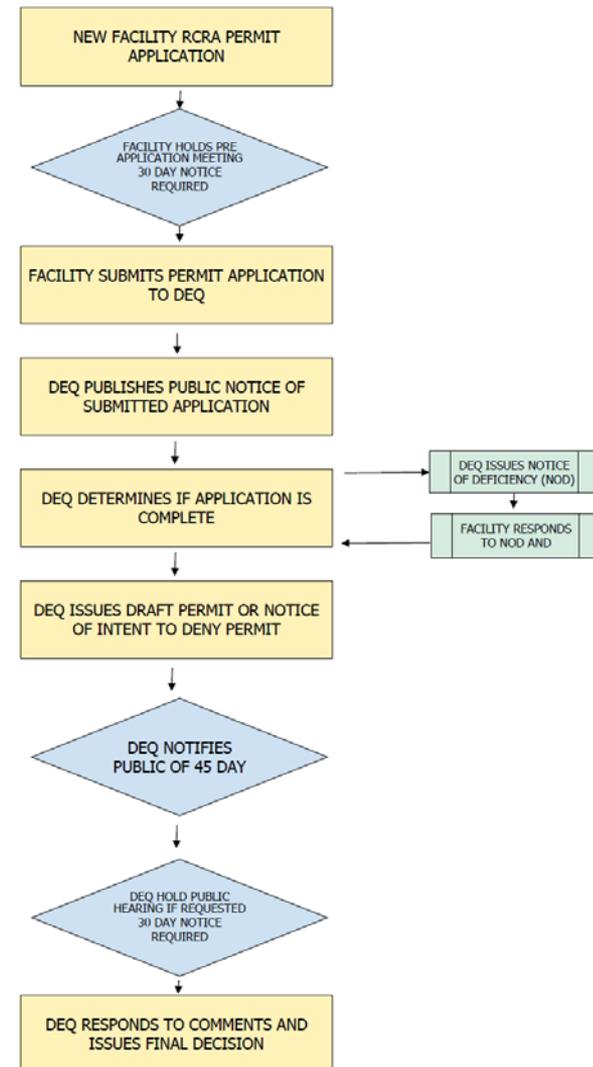
Public Notification and Participation Opportunities

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



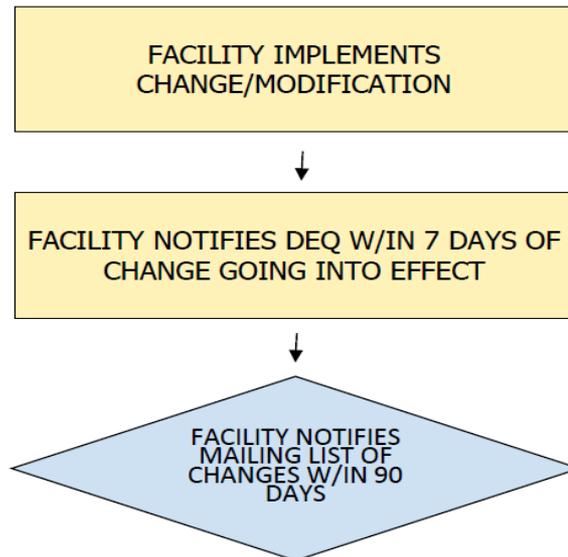
Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- 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



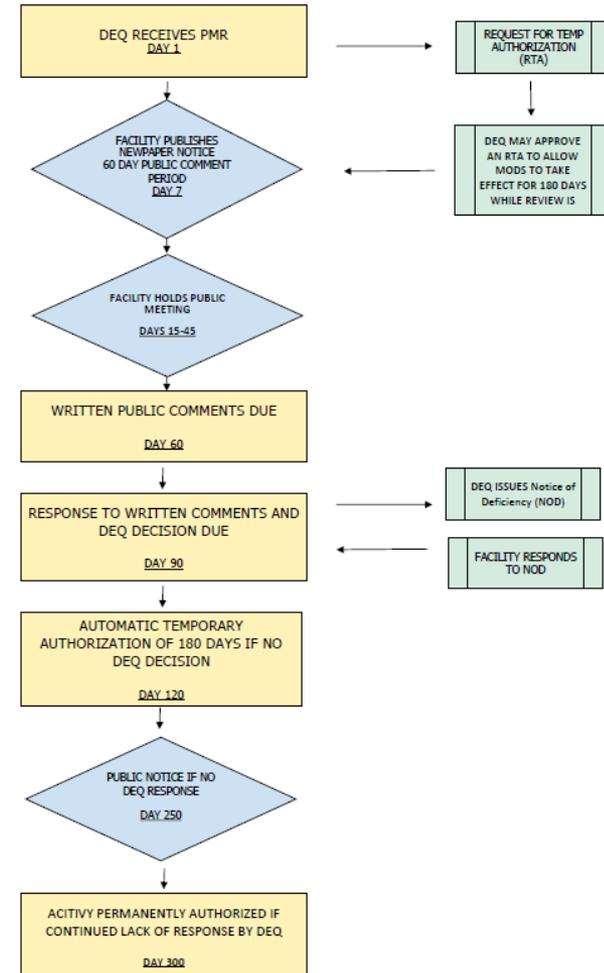
Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- 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



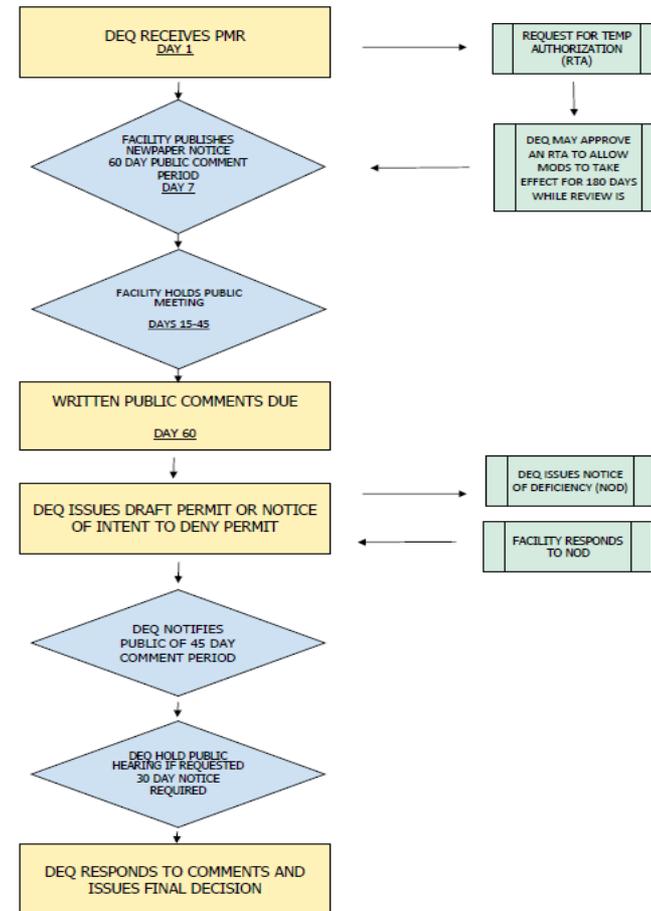
Public Notification and Participation Opportunities During the RCRA Permit Application and Permit Modification Process

- 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
 - WorkPlanhttps://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>

