

### ACCEPTABLE WASTES

- Reactives
- Isobutanol
- Methanol
- Methyl Ethyl Ketone Napthalene
- Pyridene
- Toluene
- Xylene
- **Empty containers**
- Miscellaneous chemical contaminated materials
- Labpacks and containers to be consolidated into labpacks
- Paint sludge
- Paint sludge containing chlorinated solventss
- Igniable wastes
- Toxicity characteristic wastes
- Acutely hazardous wastes
- Toxics
- Cyanides Wastewater containing organics, metals and oils
- Organic liquids
- Sludge from oxidation/reduction
- Solids from solvent still
- Stabilized waste
- Sludge from blending/separation/ storage tanks
- Spent halogenated solvents
- Oil and solvents
- Acetone
- n-Butyl alcohol
- Corrosives
- Waste ion exchange media and solids
- Benzene
- Consolidated hazardous solids
- Cyclohexane
- Cyclohexanone 1,4 Dioxane
- Ethyl acetate
- Formaldehyde
- Cumene
- Waste carbon adsorption media and
- Filter solids and media
- Hazardous liquids and solid material
- Ethyl ether
- Blended hazardous waste fuel
- Compressed hazardous waste gas
- Spent non-halogenated solvents

## TREATMENT

NSSI accepts a full spectrum of hazardous and radioactive waste materials including all D, F, P, U and K hazardous waste codes and all radionuclides, including special nuclear materials. NSSI treats gases, liquids, solids, sludges, and soils. NSSI also accepts and treats recyclables, such as chlorofluorocarbons, solvents, mercury compounds, mercury contaminated substances and fluorescent tubes. NSSI provides customer site packing and labeling services and transport to the NSSI treatment facility. NSSI is available for emergency response for decontamination of chemical and nuclear material spills and for remediation services.

#### **S**TORAGE

NSSI is currently permitted with a storage and processing capacity of 58,530 gallons in 20 tanks. An additional capacity of 180,793 gallons of container storage is provided in 5 container storage areas. NSSI provides temporary permitted storage services for generators of

#### PERMITTING

NSSI operated as an interim status Waste Treatment and Storage facility from 1980 to 1990. NSSI subsequently submitted the required Part B application and received a final Part B permit in October, 1990. Permit modifications are requested on an ongoing basis as new treatment technologies are proven and commercialized and as additional facilities are needed. NSSI is unique in that the facility permits allow storage and treatment of RCRA hazardous, mixed hazardous/radioactive and radioactive waste materials.

# PROCESS DEVELOPMENT

The NSSI waste management facility is permitted to treat wastes in portable equipment in segregated container storage areas. This allows batch processing of particular problem materials, and also facilitates research & treatment process development for waster generators and service companies. Once developed, the processes can then be commercialized and permits modified as necessary for continuous operation. NSSI has developed treatment processes for specialized Mercury wastes and for difficult hydrolysis candidates under these provisions. NSSI's management, technical, and operations experts are available to assist generators and service companies in the development of safe, secure, cost contained solutions to hazardous waste management problems.

# MIXED WASTE

In 1985, as a result of public and congressional attention, radioactive/hazardous mixed waste was addresses as part of the Low-Level Radioactive Waste Policy Amendments Act (LLRWPAA) of 1985. In 1988, EPA assumed regulatory controil of mixed waste storage and treatment facility (TSDF) permitting. Thus, mixed wastes are now subject to joint control by the NRC/Agreement State and EPA. NSSI is fully permitted to accept, store, and treat all mixed wastes including special nuclear wastes. NSSI offers safety surveys, sampling, decontamination, and a full spectrum of consultation capabilities in conunction with treatment and disposal services.

## TRANSPORTATION

NSSI transports waste materials in its own vehicles in the immediate NSSI facility area. NSSI has arrangements with many other permitted waste transporters to transport waste to NSSI from generators outside the Houston area.

# PERMITTED TREATMENTS

- Operation of Mercury Retort Unit
- Recovery of waste chemicals and other material for reuse or resale
- Blending of wastes to form a fuel for use off site
- Recycling of solvents
- Breaking down lab packs for reconsolidations for off-site disposal or onsite processing
- Consolidation of waste containers into labpacks
- Neutralization, oxidation, reduction, and other chemical reactions or physical processing (e.g. distillation) to render wastes less hazardous or more suitable for offsite disposal or on-site processing in an authorized tank or container storage unit
- Cleaning of cullet or particulate solids, empty drums, and equipment

- Centrifugation, filtration, and ion exchange in portable equipment within an authorized storage area
  Solidification or stabilization (including
- Solidification or stabilization (including amalgamation) in portable equipment in an authorized container storage area
- Shredding of containers for recovery of contents
- Consolidation of miscellaneous compatible hazardous waste
- Chemical and/or mechanical treatment to accomplish separation, settling, or clarification in portable rquipment within an authorized container storage area
- Removal of hazardous constituents by absorption on solid media in portable equipment within an authorized container storage area
- Drying of solids to meet off-site disposal criteria for release of water only

