

The Future of the  
**State-Licensed Disposal Area**  
**(SDA)**



# The Future of the State-Licensed Disposal Area

## Dialogue

Please note your questions  
and concerns.

Please note the additional  
information you may want.



**We would like this to  
be the beginning of  
an ongoing discussion.**





The Future of the  
**State-Licensed Disposal Area**

History

What is an SDA?

NYSERDA

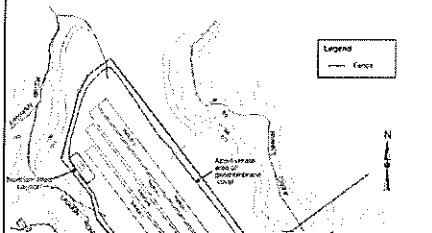
## What is an SDA?

15 acres

Commercial disposal from  
1963 - 1975

Radioactive wastes from  
many sources

One of six original I I RW



NYSERDA

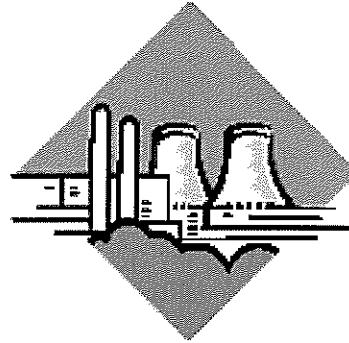
## How did the SDA come to be?

### Part of Commercializing Nuclear Industry

#### 1954 – Atomic Energy Act

Federal policy to commercialize nuclear fuel cycle

Atomic Energy Commission (AEC) began actively promoting the rapid development of nuclear power for civilian purposes



Commercialization of nuclear power necessitated waste management and disposal options

NYSERDA

## How did the SDA come to be?

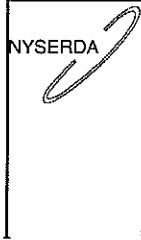
### Part of Commercializing Nuclear Industry

#### Waste Management

Prior to 1960 – Disposal of Radioactive Waste Provided by AEC  
At sites in Oak Ridge, Tennessee and in Idaho

ORNL DWG 95-8130R2

1960 - "Regional" Land Disposal Sites  
AEC endorsed the



# How did the SDA come to be?

## Part of Commercializing Nuclear Industry



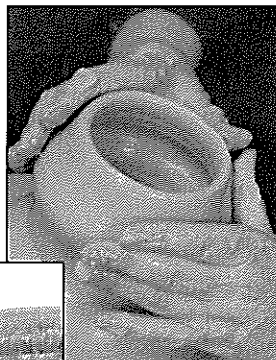
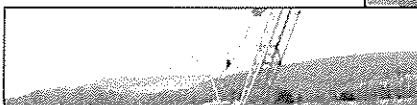
Western New York  
Nuclear Service Center

NYSERDA

Why is the SDA where it is?

In one word:

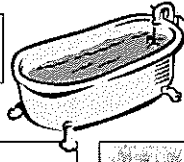
**CLAY!**



## Why is the SDA where it is?

### Key Disadvantages of CLAY:

Great water barrier! –  
Bathtub effect

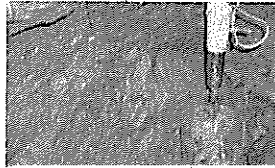


Susceptible to  
slumping and erosion

## Why is the SDA where it is?

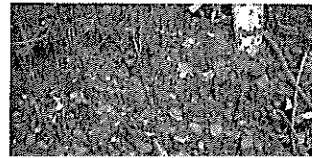
### South Plateau Clay

Water flows laterally through the upper weathered portion of the clay at a rate of approximately **4.3 ft/yr**



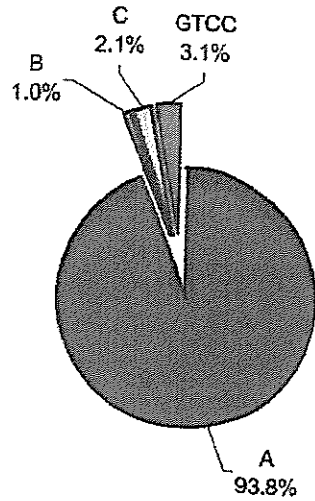
Water flows downward through the deeper unweathered portions of the

### North Plateau Sand & Gravel



## What is in the SDA?

SDA Waste Volumes by Class



### Variety of Waste Sources

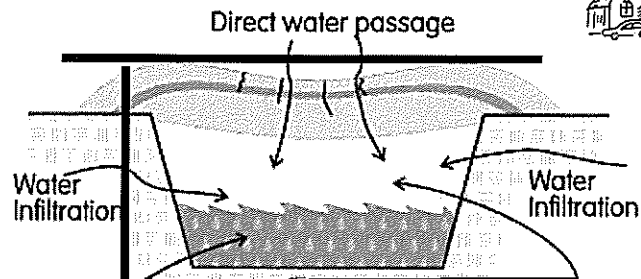
- Wastes from fuel reprocessing plant
- Institutions like hospitals and colleges
- Nuclear power plants
- Industries
- Waste Brokers
- Decontamination Facilities
- Others

## The Future of the State-Licensed Disposal Area



# What actions have been taken to prevent these problems?

We have cut off the water paths!



NYSERDA



## What actions have been taken to prevent these problems?



Geomembrane cover cut off vertical water infiltration path

A series of horizontal lines for writing, consisting of multiple sets of double lines with a central gap, typical of a notebook page.



The Future of the  
**State-Licensed Disposal Area**

Performance

What problems have occurred at the SDA?

What actions have been taken to prevent these problems?

Have these actions worked?

What additional problems could occur?



The Future of the  
**State-Licensed Disposal Area**

Performance

What problems have occurred at the SDA?

What actions have been taken to prevent these problems?

Have these actions worked?

NYSERDA

## What additional problems could occur?

### Erosion

While erosion predictions are uncertain...

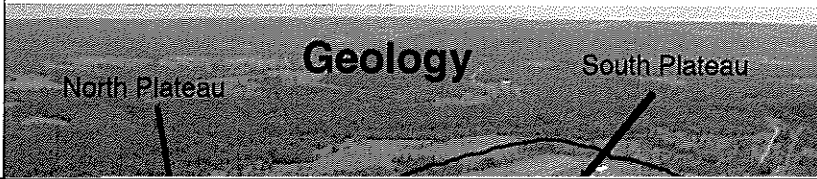


NYSERDA



**SDA Decision is ....**

**Different from the WVDP Facility Decisions**



A series of horizontal lines for writing, consisting of multiple thin lines and several thicker, more prominent lines, providing space for notes or answers.

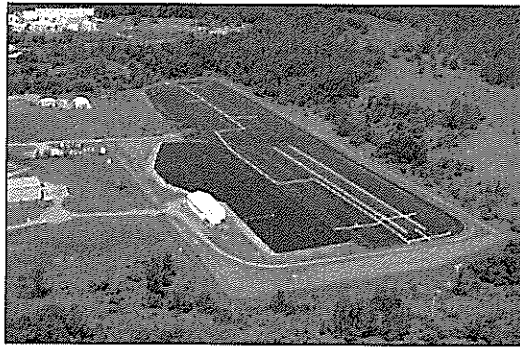
**SDA Decision is ....**

**Different from the WVDP Facility Decisions**

**Disposal Facility**

The SDA is already a disposal facility.

No major action or decision is needed to turn it into a disposal facility

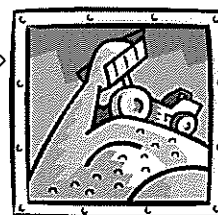
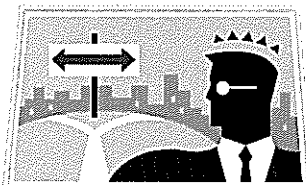


**SDA Decision is ....**

**Different from the WVDP Facility Decisions**

**Disposal Facility** does not currently exist on the north plateau

A major decision would be needed to create a new disposal facility on the north plateau

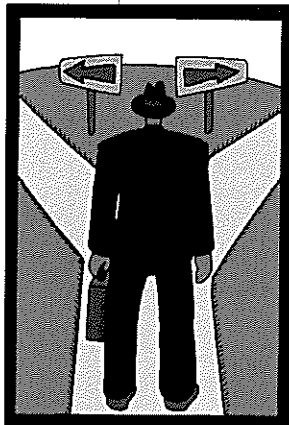


A major action would be needed to create a new disposal facility on the north plateau

**SDA Decision is ....**

**Different from the WVDP Facility Decisions**

**WVDP Act**



“The Secretary shall decontaminate and decommission....”

DOE must choose a decommissioning path

**SDA Decision is ....**

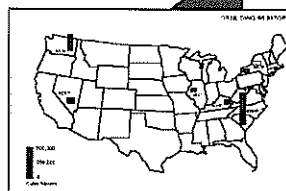
**Different from the WVDP Facility Decisions**

**WVDP Act** is not applicable to the SDA.

Decommissioning is not a requirement for the six existing commercial disposal areas.

**The SDA has...**

- A viable owner - NYSERDA
- A viable operator - NYSERDA
- A compliant licensee - NYSERDA
- A compliant permittee - NYSERDA
- A committed steward - NYSERDA



NYSERDA has the option of staying on our current path of monitoring and maintaining the SDA

**SDA Decision is ....**

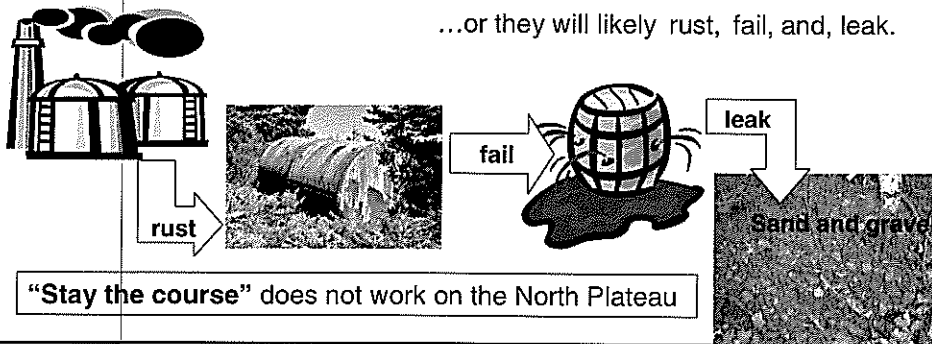
**Different from the WVDP Facility Decisions**

**Potential for Failure**

**Decision and Action Needed on North Plateau to Avoid Failure**

WVDP underground carbon steel tanks that are 40+ years old must be filled or removed ...

...or they will likely rust, fail, and, leak.



**“Stay the course” does not work on the North Plateau**

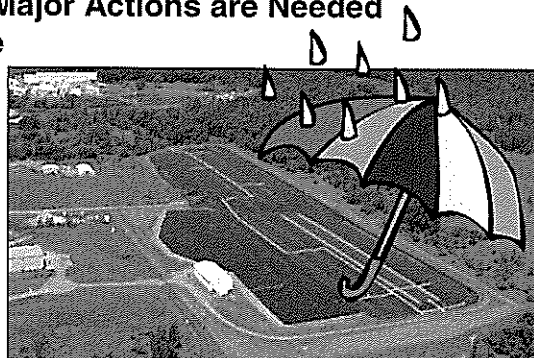
**SDA Decision is ....**

**Different from the WVDP Facility Decisions**

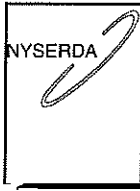
**Potential for Failure**

**At the SDA No Major Actions are Needed to Avoid Failure**

The SDA is an existing disposal area that is performing well in its current configuration.

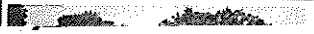


# The Future of the



## What about the long-term?

If by "long-term" we mean a **forever** decision that needs to be made **NOW** and never revisited then ...



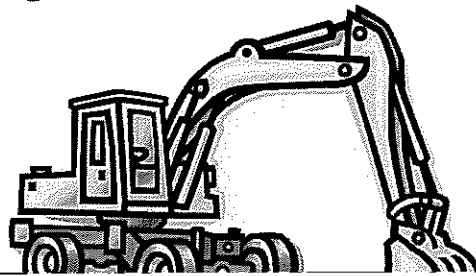
"Dia It Up"

What about the long-term?

“Dig It Up” NOW

✓ Positives

✓ Negatives



## What about the long-term?

A forever decision NOW = "Dig it Up"

### Positives



Problem not passed on to future generations of this community



More jobs in the near term



Reduced future costs



## What about the long-term?

A forever decision NOW = "Dig it Up"

### Negatives



Moved to someone else's backyard - Risk is transferred



Increased near-term risk to workers, drivers and local environment



Some other community has to trust their government



Some wastes have no home - "orphan wastes"



HYPERBOLIC

2

What about the long term?



## What about the long-term?

“Monitor and Maintain” for  
Reevaluation in the FUTURE



**Positives**



**Negatives**



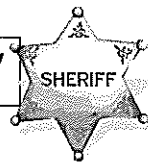
## What about the long-term?

“Monitor and Maintain” for  
Reevaluation in the FUTURE

### Positives



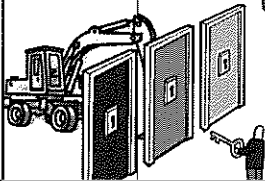
Protective of public health & safety  
and the environment



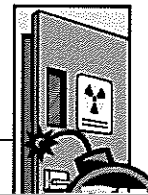
Minimal near-term costs



Preserves the option to “Dig It Up” or  
do something different in the future



Does not allow human access to the  
wastes thus avoiding the potential



NYSERDA



## What about the long-term?

“Monitor and Maintain” for Reevaluation in the FUTURE

### Positives

- ✓ Does not transfer the risk to someone else’s backyard
- ✓ Does not create “orphan wastes”
- ✓ Stable level of employment at the SDA

Home?

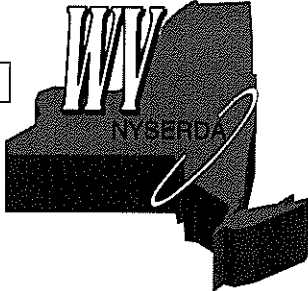


NYSERDA

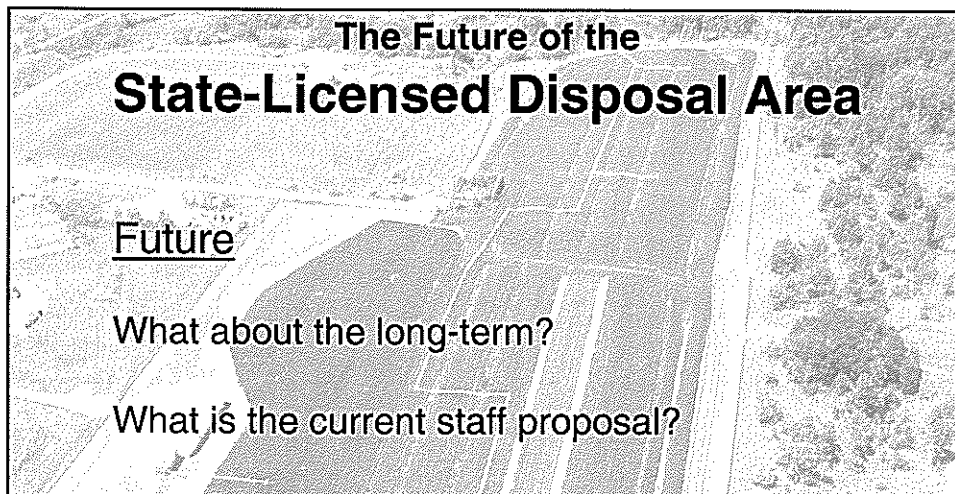
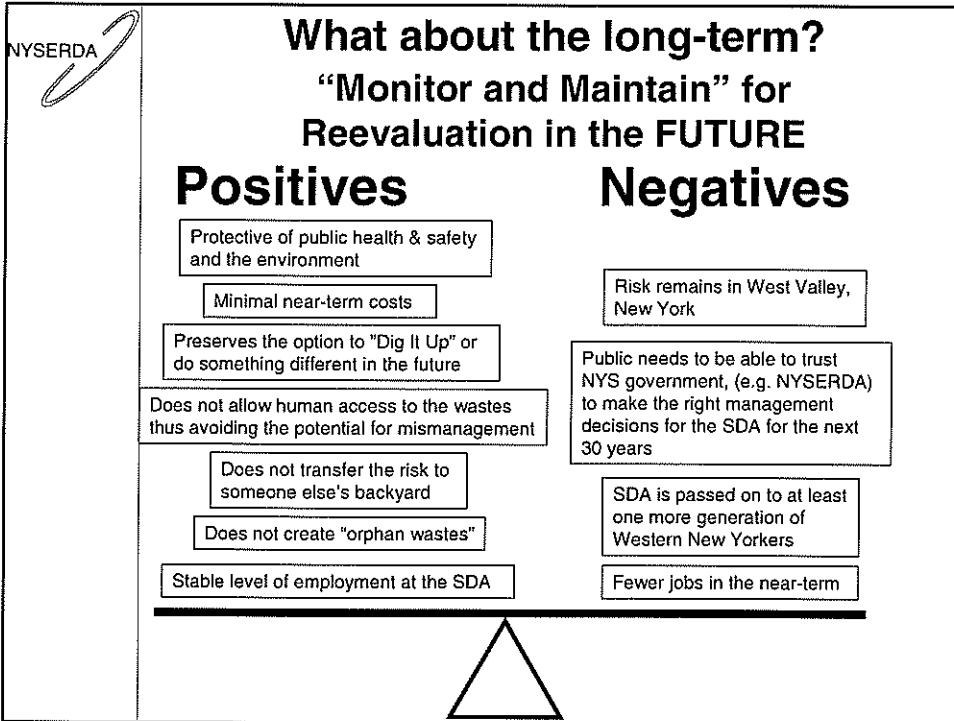
## What about the long-term?

“Monitor and Maintain” for Reevaluation in the FUTURE

### Negatives

- ✓ Risk remains in West Valley, New York
- ✓ Public needs to be able to trust NYS government, (e.g., NYSERDA) to make the right management decisions for the SDA for the next 30 years
- ✓ SDA is passed on to at least one more generation of Western New Yorkers
- ✓ Fewer jobs in the near term

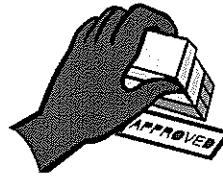


## What is the current staff proposal?

### Only a Staff Proposal!

We still need ....

- To comply with the State Environmental Quality Review Act (SEQRA)



NYSERDA



## What is the current staff proposal?

### **“Monitor and Maintain” for Reevaluation in the FUTURE**

For a period of time (e.g., 30 years)  
NYSERDA believes the SDA can be  
safely managed in place...



### What is the current staff proposal?

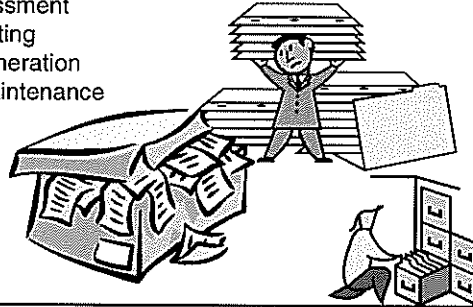
“Monitor and Maintain” for  
Reevaluation in the FUTURE

## REQUIREMENTS



### Active Onsite Management

- Environmental monitoring
- Facility inspections
- Facility maintenance
- Data assessment
- Data reporting
- Record generation
- Record maintenance



### What is the current staff proposal?

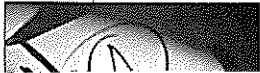
“Monitor and Maintain” for  
Reevaluation in the FUTURE

## REQUIREMENTS



### Periodic Reevaluation

- Human health and environment still protected?
- Water infiltration controls still working?



# What is the current staff proposal?

“Monitor and Maintain” for  
Reevaluation in the FUTURE

## REQUIREMENTS



Regulatory Oversight



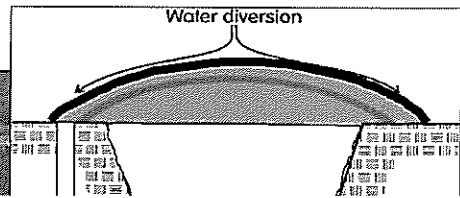
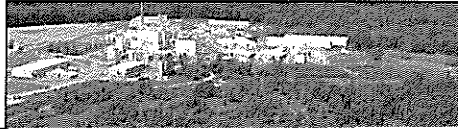
- Permits and licenses
- Approval of actions and decisions
- Compliance Inspections
- Enforceable – violations, fines, penalties



NYSERDA

## What is the rationale?

The SDA is performing well.

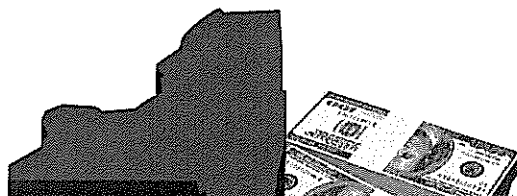


NYSERDA



## What is the rationale?

Large cost to "Dig It Up" NOW  
yields minimal near-term benefits.





The Future of the  
**State-Licensed Disposal Area**

Dialogue

What are your questions and concerns?

What additional information do you want?

**We would like this to be the beginning of  
an ongoing discussion.**