

# Implementing RCRA Land Revitalization Measures

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USEPA  
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Clu-In Session

## Cross-Programmatic Approach

- Outgrowth of One Cleanup Program Initiative
- Acres based
- Linking contaminated land, cleanup, and land use.  
Tells the “Story” better.
- Interim Guidance for OSWER Cross-Program Revitalization, October 2006  
**<http://www.epa.gov/oswer/landrevitalization/docs/cprmguidance-10-20-06covermemo.pdf>**

# RCRA Land Revitalization Measures Guidance

*Guidance for Documenting  
and Reporting  
RCRA Subtitle C Corrective Action  
Land Revitalization Indicators and  
Performance Measures*

**February 21, 2007**

Posted at:

[http://www.epa.gov/epaoswer/hazwaste/ca/resource/guidance/brfields/lr\\_guid.pdf](http://www.epa.gov/epaoswer/hazwaste/ca/resource/guidance/brfields/lr_guid.pdf)

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## OSWER Land Revitalization Indicators and Performance Measures

### Indicators

- Universe
- Status of Use (optional)
- Type of Use (optional)

### Performance Measures

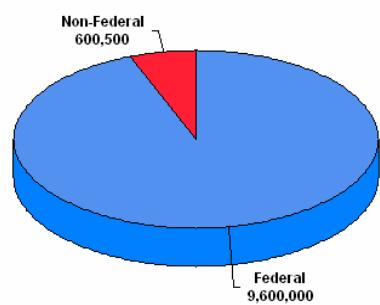
- “Protective for People Under Current Conditions” (PFP) - Acres
- “Ready for Anticipated Use” (RAU) - Acres

## RCRA Land Revitalization Universe

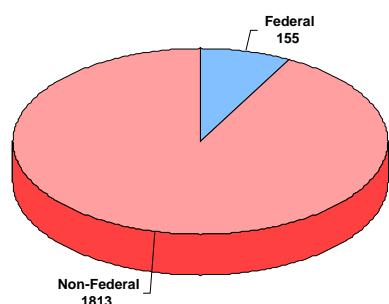
- ❑ RCRA Corrective Action GPRA 2008 baseline used for measures for 2007 and 2008.
  - Acres for these sites were collected in 2006
  - 1,968 facilities on the CA 2008 baseline
  - 10,187,000 acres in the CA 2008 baseline
- ❑ After 2008, the RCRA CA 2020 Universe will be used.
  - 3,746 facilities on the CA 2020 Baseline
  - Acreage information for these sites - not yet compiled
  - Acreage Info for these sites due: end of FY2009

## Total Acres 2008 CA Baseline

CA 2008 Universe - Acres



CA 2008 Universe - Facilities



## Status and Use Indicators (optional)

Land Revitalization Guidance included two optional indicators.

- Region 3 reported this information last year.
- A few Regions are currently collecting this information.

### Status of Use Indicator (optional)

- For facilities in the Universe Indicator, reports the status of use (e.g. unused, reused) of acres at a facility at the time that the information is reported.

### Type of Use Indicator (optional)

- For facilities in the Universe Indicator, reports the type of use (e.g. industrial, residential) of acres at a facility at the time that the information is reported.

## Protective for People Under Current Conditions Measure (PFP)

The Human Exposures Under Control Environmental Indicator (HE EI) will be used as the indicator of Protective for People Under Current Conditions Measure" (PFP)

- *The Human Exposures Under Control Environmental Indicator (HE EI) is reported in RCRAInfo with the CA725 data element.*
- *OSW will use RCRAInfo to identify all RCRA facilities in the universe that have a facility-wide CA725 determination of yes (YE) and report these facilities as having met PFP.*
- *OSW will also report the number of acres of the facilities that have met the PFP measure.*
  - *Until "acres" is included as a data element in RCRAInfo, OSW will maintain a database of facility acreage and compile that information.*

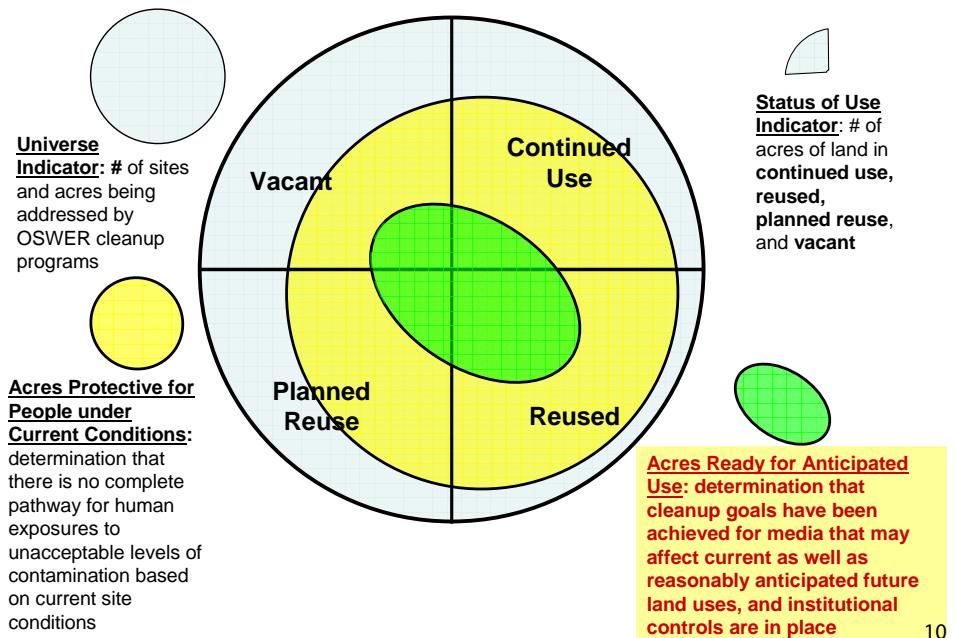
## Ready for Anticipated Use Measure

The RCRA Land Revitalization Measures Guidance lists the following criteria for the “Ready for Anticipated Use Measure” (RAU):

- Protective for People under Current Conditions Criteria has been met;
- Cleanup goals have been achieved for media that may affect current and reasonably anticipated future land uses of the facility so that there are no unacceptable risks; and
- All appropriate institutional or other controls, identified as part of a response action or remedy as required to help ensure long-term protection, are in place.

## Cross-Program Performance and Revitalization Measures Framework

(Dimensions do not reflect actual data)



## Reporting for Parcels

- Some States and Regions wanted to be able to report, on a voluntary basis, “Ready for Anticipated Uses” milestone for “parcels.”
  - RAU Determination forms should be filled out for the parcels.
- OSW will compile information sent from the Regions on parcels that have achieved the RAU. Acres for these parcels will be reported in the national totals.

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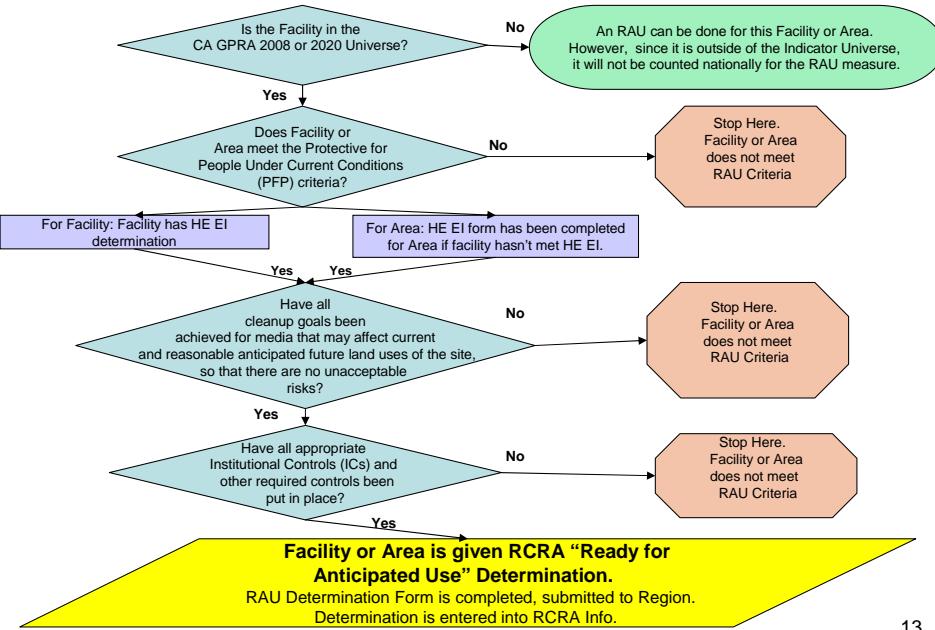
## RAU Determinations

Must meet the three criteria

- Protective for People under Current Conditions
- Safe for current and reasonably anticipated next use
- Appropriate Institutional and other controls in place
- RAU Form completed, RAU and ICs entered into RCRAInfo

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### Decision Tree - RCRA “Ready for Anticipated Use” Measure



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## Universal Challenges for RAUs

### Timing/implementation of ICs

- Some ICs are implemented long after construction complete
- Some ICs implemented by local governments and other entities on their own timing

Agency does not necessarily monitor facilities after a Completion Determination to ensure compliance of the ICs

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## Institutional Controls Could Include...

- Enactment or existence of ordinances codes, or other regulations by local government (e.g., ground water use restrictions);
- Recording of legal instruments in the chain of title for a property;
- Issuance by a regulatory authority of enforcement tools or permits; agreements between the regulatory authority and the property owners or facility operators;
- Listing of property on a State registry of contaminated sites;
- Recording of deed notices or hazard advisories in local land records; and
- For active military bases, use of base master plan, instructions, orders, and dig permit systems.

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## Controls in Place

RCRA definition of “all controls (engineered as well as institutional) in place”

- Identify and document site specific appropriate controls as part of remedy evaluation and selection or a **similar process**

EPA guidance on Institutional Controls

- "Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups", September 2000 (EPA 540-F-00-005, OSWER 9355.0-74FS-P)
- ANPR, 61 FR 19432

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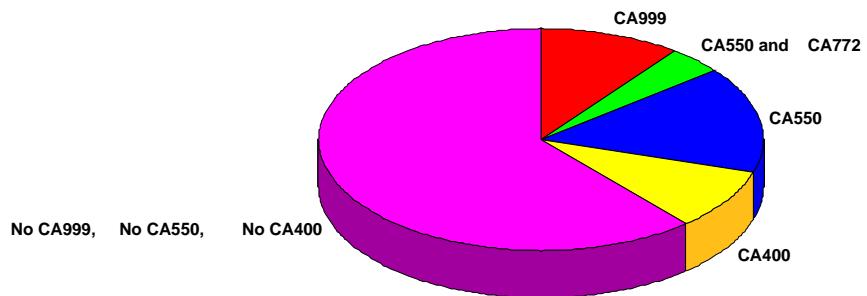
## Implementing the RCRA Land Revitalization Measures

|                           |  |
|---------------------------|--|
| October 2006              | OSWER Cross Program Guidance   |
| February 2007             | RCRA Land Revitalization Measures Guidance   |
| May 2007 and October 2007 | OSW submits RCRA Status Report – included number of facilities and acres that have met PFP                 |
| December 2007             | Regions confirm RAU criteria at all CA999s   |
| October 2008              | Regions submit RAU determinations as appropriate at non-CA999 sites, OSW Submits end-of-year Status Report |
| September 2009            | Regions submit acreage for CA 2020 sites, OSW Submits end-of-year Status Report                            |
| Ongoing                   | Regions compile and report information on Use and Status indicators (optional)                             |

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## Working Towards RAU Determinations

RCRA 2008 Universe, October 2007



Facilities with a CA999 automatically receive an RAU determination

Facilities with a CA550 and with needed ICs in place can get an RAU determination. CA772 tells us at least one IC is in place, but it can't confirm that ALL needed ICs are in place. The project manager will need to confirm that all needed ICs are in place.

Facilities with a CA550, but no ICs listed in RCRAINFO, may be eligible for an RAU determination, but the project manager must check to see if there are any needed ICs and if they are in place.

Facilities with a CA400 may have some portions that are safe for anticipated use, but project manager must check to see if the surface media has been addressed and if needed ICs are in place

## The Task At Hand

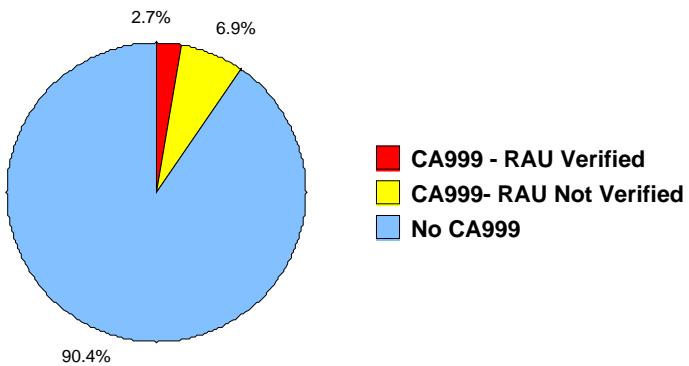
Confirming RAU IC criteria for CA999 Facilities –  
Corrective Action Activities Terminated Sites

- To be reported by end of 2007
- Clean Closed
  - No Institutional Controls are needed
- Waste left on site
  - Determine if institutional and other controls are appropriate
  - Determine if appropriate controls are in place

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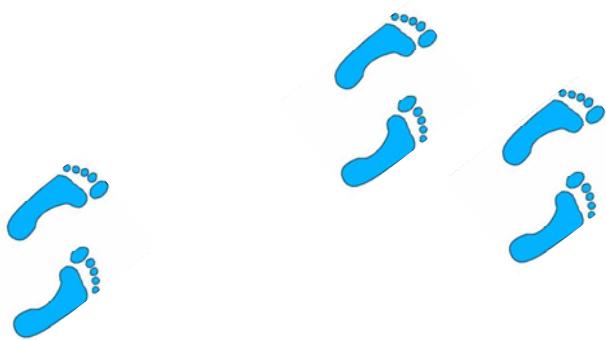
## Facilities with CA999

**RCRA 2008 Facilities with CA999**  
**October 2007**



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## Next Steps



## Facilities that have met “Construction Complete” CA550

- Does the site meet PFP (HE EI)
- Have cleanup goals have been achieved for media that may affect current and reasonably anticipated future land uses of the facility so that there are no unacceptable risks?
- Are all appropriate institutional or other controls, identified as part of a response action or remedy as required to help ensure long-term protection, are in place?
- Document RAU
  - Complete RAU Form (See Attachment)
  - Enter RAU code into RCRAInfo (data element to be added to database)
  - Enter all ICs that have been implemented into RCRAInfo CA772.

## Compiling Acreage of RCRA 2020 Facilities

- Regions and States should begin compiling acreage information for the RCRA 2020 facilities
- This information will be reported nationally at the end of Fiscal Year 2009

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## Implementing Land Revitalization Measures – Regional Experiences

- Region 6 – Jeanne Schulz
- Region 5 – Gary Victorine
- Region 10 – Mike Slater

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## *RCRA PROGRAM*

# LAND REUSE MEASURES IMPLEMENTATION

Clu-In Internet Seminar  
November 6, 2007

## Background

- R6 includes: AR, LA, NM, OK, TX
- 2008 GPRA Baseline = 233 Facilities
- 2020 Baseline = 414 Facilities
- All states are authorized
- FY 2006/2007: Contractor conducted file reviews at state offices to collect data on:
  - ICs / ECs
  - Land reuse info (measures/indicators)
  - GPRA milestones (CA 725/750/400/550 for certain RCRA 2020 sites)

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## Background (cont.)

- All 2008 GPRA Baseline facilities were reviewed; also 52 TX and 17 LA RCRA 2020 facilities
- All (233) 2008 GPRA facilities and 100 of the remaining RCRA 2020 facilities (181 total) have been assigned to EPA Project Managers to oversee

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## Background (Cont.)

- The most resource intensive facilities have been assigned to EPA Project Managers, who will be responsible for populating Region 6's facility management database, "R6CATS" (modeled after Region 1's), w/GPRA, IC/EC, and land reuse info
  - Wherever possible, this information will be downloaded directly from RCRAInfo
- Region 6 demonstrated R6CATS to our states in late-FY 07. We expect most will adopt the system by FY 09 to track corrective action progress and land revitalization measures/indicators

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## R6 Measures/Indicators Reporting Status

- Sitewide CA999s: Used contractor checklists, and, where necessary, contacted States to verify cleanup/IC status
- Developed contractor checklists based on:
  - Existing CPRM guidance
  - EPA's Institutional Control Tracking System (Superfund) data elements
  - RCRAInfo IC/EC data elements
  - GPRA (725/750) checklists
  - State-specific guidelines (CA 400/500 determinations)

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## **R6 Measures/Indicators Reporting Status (cont.)**

- 10/18/07: Reported sites/acres RAU for (32) sitewide CA 999 facilities in RCRAInfo
- By 12/31/07, complete RAU form and type/status of use form for CA 999s deemed RAU. Load RAU forms on internet
- January 08: Train EPA and State Project Managers on land reuse measures/indicators, documentation, etc.

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## R6 Measures/Indicators Reporting Status (cont.)

- By 9/30/08, evaluate:
  - All 2008 GPRA facilities for RAU, type and status of use. Report results to OSW (sitewide and area specific)
  - 52 Texas and 17 Louisiana RCRA 2020 facilities (that had file reviews conducted) for RAU, type and status of use. Report results to OSW (sitewide and area specific)
- For FY 09:
  - Negotiate w/states grant commitment to collect acreage for remaining RCRA 2020 sites by 9/09
  - Negotiate w/states grant commitment to evaluate certain RCRA 2020 sites for RAU, status/type of use
    - Start w/CA 999s, and work from there

## For more information...

*Contact:*

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*or*

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# Thank You

After viewing the links to additional resources,  
please complete our online feedback form.



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