Community Based Reuse Planning

Section #1 – Community Based Reuse Planning Overview

Section #2 – Why Plan for Reuse?

Section #3 – What is Community Based Reuse Planning?

Section #4 – Key considerations and lessons learned
Section #1

Community Based Reuse Planning Overview
Community Based Reuse Planning
Overview

An approach based on:

• Experience supporting community based reuse planning at 58 SF sites in 28 states and 10 regions.

• EPA’s Reuse Assessment Guidance

• EPA’s Seven Steps for Effective Public Involvement

• IAP2’s Core Values for Public Participation (endorsed by Superfund Community Involvement Handbook)
HOD Landfill – Antioch, Illinois
HOD Landfill

Renewable Energy Project Site
HOD Landfill

- Captures landfill gas to produce electricity and heat for the Antioch Community High School's "Green Energy"
- Generates energy equivalent to satisfying the energy demand for 120 homes
- Reduces the greenhouse gas effects equivalent to removing 3,400 cars from the road for a year or planting 570 acres of trees

Designed, constructed, and operated by
RMT, Inc.
Madison, Wisconsin
Community Based Reuse Planning

E² Inc. Projects
June 2009

Key

Reuse Planning Assistance

58 sites
Reuse Assessments: A Tool to Implement the Land Use Directive 2001
EPA’s Seven Steps to Effective Public Involvement

• Plan and budget for public involvement.

• Identify interested and affected public.

• Consider providing technical and financial assistance to the public to facilitate involvement.

• Provide information and outreach to the public.

• Conduct public consultation and involvement.

• Review and use input, and provide feedback to the public.

• Evaluate public involvement activities.
International Association of Public Participation – Core Values

• People should have a say in the decisions about actions that affect their lives.

• Public participation includes the promise that the public’s contribution will influence the decision.

• The public participation process communicates the interests and meets the needs of all participants.

• The public participation process seeks out and facilitates the involvement of those who are potentially affected.
• The public participation process involves citizens in defining how they participate.

• The public participation process communicates to participants how their input was or was not used.

• The public participation process provides participants with the information they need to participate in a meaningful way.
Section #2

Why community based reuse planning?
Community-Based Reuse Assessment
Why Plan for Reuse?

Better Decisions
Multiple Potential Benefits

• Save $$$
• Save Time
• Improved Community Relationships
• Effective Institutional Controls
• Long Term Stewardship
• Community Benefits
  – Economic
  – Recreational
  – Ecological
Lake Highland Preparatory
Plainwell Paper Mill

Improved Community Relations
Wyckoff/Eagle Harbor
Wyckoff/Eagle Harbor
Wyckoff/Eagle Harbor
South Point, Ohio
South Point, Ohio
South Point, Ohio

Community Benefits: Economic
Calumet Container

Community Benefits: Ecological/Open Space
Calumet Container

Community Benefits: Ecological/Open Space
Calumet Container

Community Benefits: Ecological/Open Space
Section #3

What is Community Based Reuse Planning?
What is Reuse Planning?

Map Key

- **Mixed Uses**
  - Residential above
  - Commercial retail/office below

- **Residential Use**
  - Multi-story units

- **Supporting Uses**
  - Parking
  - Open Space

- **Open Space**
  - Civic, Active Recreation

- **Entrance Corridor**
  - Signage, Landscape Features

- **Open Space**
  - Trails, Passive Recreation

- **Commercial Use**
  - Retail or Office

- **Site & River Access**
  - Trail Network Opportunity

- **Site Access Points**

Legend:
- Property Boundary
- Methane System
- Road Network

north
What is Reuse Planning?

1. Building stakeholder support and establishing the legitimacy of the reuse planning process
2. Community involvement, education, and capacity-building
3. Site and community research and analysis
4. Site reuse strategy: conceptual reuse framework
5. Next steps
   a. Implementation approach
   b. Identification of resources

Reuse Assessment Guidance

- Stakeholders
- Community input
- Site description
- Environmental considerations
- Site ownership
- Land use considerations and environmental regulations
- Public initiatives

Reuse Planning
#1. Building **stakeholder support** and **establishing the legitimacy** of the reuse planning process.
#2. Community involvement, education, and capacity-building.

#3. Site and community research and analysis.
Site and Community Information

- Site Physical Characteristics
- Site Contamination and Remediation Characteristics
- Site Remediation Status
- Local Land Use Regulations and Considerations
- Adjacent Land Uses
- Infrastructure
- Market Conditions
#4. Site reuse strategy: conceptual reuse framework
#5. Next steps

a. Implementation approach

b. Identification of resources
Reuse Planning

1. Building stakeholder support and establishing the legitimacy of the reuse planning process

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Section #4

Key Considerations and Lessons Learned
• Reuse planning at Superfund sites requires patience and a view towards long term stewardship.

• Reuse in the context of Superfund is about making better remedial decisions and ensuring long-term protectiveness.

• Reuse is considered in the framework of private property rights and the local authority to regulate land use.

• Considering reuse can create a framework for community involvement that moves beyond a win-lose dynamic. It can be the key to a successful working relationship amongst stakeholders at a SF site.
Mountain View Mobile Home Estates: How a municipality can make informed reuse decisions about reuse

Gary Riley,
OSRTI Detail, EPA
Region 9
SRI Webinar,
June 18, 2009
Session Overview

- Focus on the community’s experience
- Stepping back: site background and context
- Solution: community-based reuse assessment
- Anatomy of success
- Looking ahead
Community experience in the reuse planning process

• Three goals:
  – Understand the site
  – Think about the city’s needs
  – Make an informed decision

• Two questions:
  – What does the Mountain View site offer?
  – What does the community want/need?
Background: site history

- Until 1973: Onsite mill processed chrysotile asbestos
- 1973: Property rezoned residential; mobile homes installed for 130 residents
- 1983: Site listed on NPL due to asbestos in soil
- 1985: Residents relocated
- 1985-1988: Remedy constructed and completed
- 1988: Deleted from NPL
Background: remedy and restrictions

- Cap components: filter fabric liner, 24-inch soil layer, 3-inch gravel layer
- Important restrictions:
  - No excavation below the fabric liner;
  - Footings or foundations allowed only within or on top of the two-foot cover;
  - Utilities allowed only within or on top of the two-foot cover;
  - Impervious areas must include drainage conveyance to protect the cover;
  - Engineering and institutional controls must remain in place; and
  - Residential uses not permitted.
Background: the site since deletion

- Since NPL deletion in 1988, the site has been vacant and fenced
- Owned by state of Arizona
- ADEQ oversees cap maintenance
- Relatively level land area
- Visible and accessible from major thoroughfares
Community experience: What does the Mountain View site offer?

- Relatively large site
- Location on Highway 70 and Route 77
- Potential rail access
- Potential low cost of land – below market value
- Currently zoned “intermediate commercial”
- No existing infrastructure
Community experience: What does the community want/need?

- Globe has a moderate amount of commercially zoned land, but no light industrial and little general industrial property
- City of Globe is surrounded by state and federally owned land – this limits expansion possibilities
- City of Globe officials and staff expressed interest in acquiring and using the Mountain View site
Solution: Community-Based Reuse Assessment

• In order to answer the City of Globe’s questions: a community-based Reuse Assessment process

• Purpose: to identify a reasonable future use and development scenario to inform near-term site planning efforts, such as:
  – Economic planning (City of Globe)
  – Regulatory documentation (EPA/ADEQ)
Community-Based Reuse Assessment: Methods

• Site visit
• Stakeholder interviews
• City Comprehensive Plan and Zoning
• Site document review
• Site analysis (contaminants, cover, grades)
• Summary document
Community-Based Reuse Assessment: Conclusions

• The resulting document provides detailed descriptions and diagrams that describe:
  – Site context (physical and zoning)
  – Contamination
  – Depth of Cover
  – Grade and slope
  – Possible development areas and footprints
  – Access and setback requirements
Community-Based Reuse Assessment: Conclusions

• These analyses offer potential development solutions to the following questions:
  – Which areas of the site can support development?
  – What would possible footprints look like?
  – How much grading would have to be done to support buildings?
  – What are the options/costs of this grading?
  – Where/how can you access the developable areas?
  – What setbacks are required in the developable areas?

How much remedy disturbance is anticipated?
Aerial map: City of Globe and Site
Site Contamination
Depth of Cover

Mountain View Mobile Home Estates Superfund Site
Globe, Arizona

Map sources: Mathiowetz Hydro Joint Venture, January 1986 “As Built,” Sheets 1-8
Rust, May 1983, Figure B-1 Boring Locations and Results
Remedy Components and Restrictions
Potential Development Areas

Mountain View Mobile Home Estates Superfund Site
Globe, Arizona

Map sources: Mott MacDonald Joint Venture, January 1986 "As Built," Sheets 1-8
RPS, May 1983, Figure 8-1 Boring Locations and Results
Access and Setbacks

Mountain View Mobile Home Estates Superfund Site
Globe, Arizona

Map sources:
- Malland-Hyder Joint Venture, January 1986 "As Built," Sheets 1-8
- B/P/E, May 1983, Figure B-1 Boring Locations and Results
Thinking about Remedy Disturbance

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Construction Costs</th>
<th>Community and Regulatory Process</th>
<th>Market Considerations</th>
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<tbody>
<tr>
<td><strong>1. No disturbance</strong></td>
<td>Potential fill costs to achieve level grades, some monitoring requirements</td>
<td>Minimal</td>
<td>Narrow range of development options</td>
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<tr>
<td>(no underground utilities, tanks or footings; all utilities/construction above grade of cap and fill)</td>
<td>Potential fill costs to achieve level grades; Asbestos monitoring requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Moderate disturbance</strong></td>
<td>Potential fill costs to achieve level grades; Asbestos monitoring requirements</td>
<td>Moderate</td>
<td>Broader range of options</td>
</tr>
<tr>
<td>(minimal disturbance to lay a few key utilities and footings within existing or new clean fill)</td>
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<tr>
<td><strong>3. Major disturbance</strong></td>
<td>Fill costs; Asbestos monitoring requirements; Contaminant handling &amp; disposal requirements</td>
<td>Comprehensive</td>
<td>Broadest range of options; market value may not offset additional development costs</td>
</tr>
<tr>
<td>(earth moving and/or excavation to create level grades, extensive utilities, and/or underground tanks)</td>
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</table>
Community-Based Reuse Assessment: Results

• Summarized remedy, restrictions, and future use possibilities in a clear manner

• Identified physical benefits and limitations of the site (including infrastructure constraints)
Outcome

- State of Arizona still owns site
- City has decided NOT to purchase at this time
- ADEQ better understands the site’s potential for future use
- Reuse assessment remains as a useful tool for future interested parties
- EPA Region 9 considers this outcome to be a huge success
Anatomy of Success

• Reuse Assessment documents useful, practical information about the site’s development potential

• City of Globe’s perspective changed over the course of the reuse assessment process, BUT –

• Community now has clarity on appropriate land uses

• Community feels included in the process

• Community feels that their voices were heard
For More Information:

Gary Riley
EPA Region 9
415.972.3003
riley.gary@epa.gov
Site Background

• Location: Antioch, Illinois

• 121 Acres
  – Former landfill covered 51 acres
  – Remaining 70 acres include the former landfill borrow area and wetlands

• Disposal activities: 1963 to 1984

• Municipal, commercial, and industrial wastes
Remedial Activities

- Landfill covered with clay cap in 1989
- Vinyl chloride contamination discovered
- 1998 a Record of Decision selected the Site remedy
  - Restore existing eroded cap
  - Update gas and leachate collection system
  - Ground water monitoring
  - Implement institutional controls
Remedial Design: Thinking Ahead

• Re-graded the Site to sports-field specifications

• Placed gas extraction well heads in locations to allow recreational users to play above them

• Constructed the gas flare building to prevent interference with placement of sports fields
Reuse Possibilities

- Methane gas co-generation system
- Athletic fields for the high school
- Restored ecological habitat and education opportunities
So what could possibly go wrong?
Challenges

• Superfund Site Stigma
• Site restrictions prohibiting recreational use
• Coordination between Antioch Township, Village, and the School District
• Funding for Reuse
Key Stakeholders

• Community
  – Antioch Community High School
  – Village of Antioch
  – Antioch Township

• Waste Management of Illinois
  – Closed Sites Management Group

• EPA, Region 5
• EPA, Headquarters
Addressing Superfund Site Stigma: SRI Pilot Project

• Met with residents, Waste Management, redevelopment team and promoted open communication across stakeholders

• Provided assistance with a redevelopment team to plan reuse at the Site which involved multiple meetings and solicited feedback from ALL stakeholders

• Helped identify barriers put in place by EPA
Addressing Superfund Site Stigma

- Ready for Reuse Determination

On this day, November 12, 2003, the U.S. Environmental Protection Agency (U.S. EPA) Determines that the

H.O.D. Landfill Superfund Site Is Ready for Recreational Reuse

U.S. EPA Region 5
Supersite Director

This letter is for Reuse Determination (RID) for the 33-year H.O.D. Landfill Superfund Site ("Site"). This RID provides information that the U.S. EPA has made a technical determination that the Site, located in the Village of Antioch, Lake County, IL, is ready for limited recreational use and the Site currently will remain protected of human health and the environment, subject to operation and maintenance of the Site and the limitations as specified in the Record of Decision (ROD) and the Declaration of Significant Delineation (DOD), which have been communicated to the interested parties. Ready for Reuse Determination: H.O.D. Landfill Superfund Site, November 12, 2003. This RID remains valid only as long as the requirements and limitations specified in the RID and the ROD are met.

This RID is for limited recreational use only, and does not imply funding for, nor direct approval or implicitly endorse, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. U.S. EPA assumes no responsibility for such activities or for any practical or potential harms that might result from such activities. This RID provides information that the Site, including all of its environmental restoration, has been designed and constructed in accordance with the RID and that the RID requirements are satisfied, subject to operation and maintenance of the Site and the limitations as specified in the RID and the ROD.

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Explanation of Significant Differences: Removing Reuse Barriers

- Fence surrounding the Site as part of the remedy no longer required
- Institutional controls clarified
Explanation of Significant Differences: Removing Reuse Barriers

• 1998 ROD
  – Six-foot chain-linked fence topped with barbed wire

• 2003 ESD
  – Removal of the original fence
  – Only fencing O&M areas
  – Locking and securing remedial equipment not included in the fenced O&M areas
Reuse Coordination

• Antioch Community High School, the Village of Antioch, and Antioch Township
  – Each had individual ideas for using the Site
  – The planning process took more time than anticipated
Funding for Reuse

- Donations and leasing from Waste Management
- Non-settling PRP contributions
- Grants
- U.S. Soccer Foundation support
Before Reuse
Reuse Success:
Tim Osmond Sports Complex
Reuse Success: McMillen Park
Reuse Success: Co-generation Plant

- Designed by RMT Inc.
- The co-generation plant has received numerous awards
- The plant began operating in September 2003
- Educational opportunities
Timeline for H.O.D. Landfill

1963-1984: Disposal activities

1989: Landfill covered with clay cap

1990: H.O.D. landfill added to the EPA's NPL

1998: ROD signed selecting the site cleanup plan

2001: Remedy construction completed

2002: H.O.D. landfill becomes an SRI pilot site

2002: Reuse partnership forms between Antioch Township, Village, and school district

April 2003: Formal reuse plans are developed

September 2003: methane co-generation plant begins operation

August 2003: ESD issued modifying the fence required at the site

November 2003: RfR issued for the site

2005: The school district begins constructing fields at the site

2002: H.O.D. landfill becomes an SRI pilot site

2003: Reuse partnership splits between Antioch Township, Village, and school district

April 2008: The Village and Township celebrate grand opening of the Tim Osmond Sports Complex

May 2008: The school district celebrates the grand opening of McMillen Park
Lessons Learned

- Listen to the concerns of the community – there are tools that can help
- Cleanup does not equal done
- EPA CAN be barrier, but can also help
- Reuse and O&M can go hand in hand