

# PROJECT XL 2002 ANNUAL REPORT

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Stakeholder Meeting  
April 28, 2003

# MEETING AGENDA

- Refresher on Project XL
- MSD's Annual Report
- Agreements in Lieu of Permits
- Supplemental Environmental Projects
- POC reduction initiatives
- Open Discussion

# PROJECT XL

The goal of this project is to achieve greater environmental benefit for Chenoweth Run through an alternate approach to the pretreatment program.

# PROJECT XL

- Implement Pretreatment Performance Measures (safety net)
- Redevelop permit relationships with industry
- Reallocate resources toward achieving greater environmental benefit
- Involve stakeholders throughout
- Five-year experiment
- Annual reporting

# 2002 ANNUAL REPORT

- Submitted to EPA on 4/1/03
- Evaluates Performance Measures
- Identifies Pollutants of Concern (POCs)
- Reviews Commitments, Aspirations & Milestones
- Copy available on request

# MSD receives official authorization to implement Project XL

- MSD WDRs Modified October 1, 2002
- KPDES permit reissued June 1, 2002
- State Statutes passed December 12, 2002.

MSD has used the date of June 1, 2002 as the official start of this XL Project.

# MSD Continued Monitoring

- Treatment plant influent and effluent
- Special quarterly sampling
  - February, June, August and November
  - One week long events
  - Treatment plant influent, effluent, biosolids, collection system manholes, and significant industrial users
- Industrial users not considered significant were sampled during only one of the quarters
- Stream samples one day each of the quarter

# MSD Involved Stakeholders

- Stakeholder meeting held on April 30, 2002.
- Stakeholder work group
  - reactivated in 2002
  - participated in revising the permitting of IUs and SIUs
  - five meetings were held
    - determined the eligibility of IUs for agreements
    - drafted the IU and NCIU agreement language

# MSD Prepared Reports

- 2001 Annual report in April 2002
- Semi-annual report in October 2002
- 2002 Annual Report in April 2003

# MSD developed agreements in lieu of permits for select industrial users

- Indirect user agreements developed with stakeholder involvement for those IUs that meet the criteria for less regulatory oversight.
- Five stakeholder workgroup meetings were held to
  - establish the list of eligible industries,
  - define approved supplemental environmental projects, and
  - develop agreement language.

# Agreements in lieu of permits Issued for select industrial users

## IU Agreements

- Eleven industries qualified
- Ten industries were issued an IU Agreement in lieu of a SIU permit
- The remaining eligible industry elected to have a SIU permit
- Effective date was January 1, 2003

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# Agreements in lieu of permits Issued for select Categorical industrial users

## NCIU Agreements

- Two categorical industries were eligible
- Both were issued agreements
- Effective date was January 1, 2003

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# SIU permits Issued for select Significant Industrial Users

- Three industries did not qualify for IU or NCIU agreements
- These three industries were issued SIU permits
- Effective date was January 1, 2003

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# Stakeholders identified supplemental environmental projects

- Five projects
- IUs and NCIUs can elect to donate half of their savings from the previous permit relationship
- Or IUs and NCIUs can donate half of their savings to an internal Supplemental Environmental Project
- Contributions begin in 2003
- Total annual contribution is expected to be \$6,155

# Supplemental Environmental Projects

No.	Project Name	Project Sponsor	Funding Requested
1	Clean Up Chenoweth Run	City of Jeffersontown	\$2500 Annually
2	Gaslight Festival booth to Educate Public Regarding Pollutant Reduction	Kentucky Pollution Prevention Center	\$775 Annually
3	Streamside Corridor Habitat Restoration Project – Chenoweth Run Creek, Clem Property	Future Fund, Inc.	\$448 Annually
4	Stomwater best management Practices for Chenoweth Run	Kentucky Waterways Alliance, Inc.	\$10,000 Annually
5	Mapping of Local Sinkholes and Springs in the Chenoweth Run Watershed	Kentucky Geologic Survey	\$10,000 One Time

# Supplemental Environmental Projects

## Project 1 - Clean-up Chenoweth Run

Sponsor: City of Jeffersontown

Funding Requested: \$2500 Annually

# Supplemental Environmental Projects

## Project 2 - Gaslight Festival Booth

Sponsor: Kentucky Pollution Prevention Center

Funding Requested: \$775 Annually

# Supplemental Environmental Projects

## Project 3 - Streamside Corridor Restoration

Sponsor: Future Fund, Inc.

Funding Requested: \$448 Annually

# Supplemental Environmental Projects

## Project 4 - Stormwater Best Management Practices

Sponsor: Kentucky Waterways Alliance

Funding Requested: \$10,000 Annually

# Supplemental Environmental Projects

## Project 5 - Mapping of Sinkholes

Sponsor: Kentucky Geologic Survey

Funding Requested: \$10,000 One-time

# MSD Evaluated 2002 Performance Measures

- J-Town WTP performance was excellent
- J-Town WTP did not experience toxicity
- No compromises of effluent aesthetic quality
- No metals of concern in the J-Town biosolids
- No maintenance concerns attributed to industrial discharges
- Pollutants not of Concern
  - Arsenic, Cadmium, Chromium, Iron, Nickel, Selenium, Silver and Zinc

# MSD Evaluated 2002 Performance Measures

Parameters with multiple exceedances of the threshold (70% of the water quality criteria):

- ❖ Copper -
  - ❖ Routinely present above threshold
- ❖ Lead -
  - ❖ Occasionally present above threshold
  - ❖ Increasing trend
- ❖ Mercury -
  - ❖ Measured above threshold
  - ❖ Note: LOD is over 500% of the water quality criteria
- ❖ Cyanide (Amenable) -
  - ❖ Not measured above Threshold
  - ❖ Detection limit concern

# 2002 Pollutants of Concern

<u>Criteria</u>	<u>Pollutant</u>
Frequent Exceedances of PM	Cu, Hg, Pb, CN
Increasing Trend toward PM	
Stream Background Approaching Water Quality Criteria	Hg
Parameter on 303D list (Impaired Waters)	P
NPDES Permit Parameter	BOD, TSS, NH3-N, P

# MSD Baseline Monitoring Costs

<u>Description of Program</u>	<u>Annual Cost</u>
MSD Historical Program (Prior to Grant and XL)	\$40,600
MSD Revised Program (Since Grant)	
1999	\$217,700
2000	\$212,000
MSD Streamlined Program (Since XL)	
2001	\$113,600
2002	\$127,400
2003	\$127,800

# Efforts to reduce POCs through non-traditional means

- Worked with KPPC to locate unregulated sources of POCs in the industrial and commercial community.
- KPPC will assist MSD in future efforts associated with pollution prevention in the residential sector.
- Pollution prevention (P2) audits are a requirement of all the IU agreements and SIU permits. Scheduled to be complete in by mid-2003.
- Initiated dialog with the Louisville Water Company (LWC) to explore reducing the corrosive properties of the drinking water.
- Stakeholder-approved environmental projects have pollution prevention themes and will educate the public about ways to reduce pollution, especially for POCs :
  - Gaslight Festival booth and
  - Chenoweth Run clean-up project

# Pollution Prevention Audits

# Approaches Considered for Pollutants of Concern

<u>Parameter</u>	Pollution Prevention	Water Supply	Clean Sampling	Heightened Monitoring	Regulatory Control	WTP Operations
BOD	✓			✓		✓
TSS	✓			✓		✓
Ammonia	✓			✓		✓
Phosphorus	✓			✓		✓
Copper	✓	✓	✓	✓		
Mercury	✓		✓	✓		
Lead	✓	✓	✓	✓	✓	
Cyanide	✓			✓		

# General P2 Initiatives

- Better Metrics (data collection)
  - Clean sampling technique
  - Lower analytical detection limits
- Supplemental Environmental Projects
- Working Closely with KPPC

# P2 Initiatives - Residential

- Control corrosion in water supply (Lead, Copper)
- Public Education
  - Eliminate/reduce use of root killers (Copper)
  - Information campaign at city festival (Copper, Lead, Mercury)
- Thermometer Exchange (Mercury)

# P2 Initiatives - Commercial

- Best Management Practices
  - Dentists (Mercury)
  - Photo labs (Mercury)
  - Medical Facilities (Mercury)

# P2 Initiatives - Industrial

- Best Management Practices
  - Cooling towers, closed loop systems (Copper)
- Source/Regulatory Control (Lead)
- P2 Audits (KPPC)

# POC Reduction Ideas and Suggestions?

- Stakeholder suggestions?
- Other techniques for reaching the public?
- Opportunities to publicize?



# Discussion