



Local Limits Evaluation

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Local Limits Evaluation

What does Oregon DEQ expect from technical evaluation of local limits?





Federal and State Requirements

- **40 CFR Parts 403.8(4)** - “The POTW shall develop local limits as required in 403.5(c)(1)”
- **Oregon DEQ permit** - “The permittee must perform a technical evaluation of the need to revise local limits within 18 months after permit re-issuance unless the Department authorizes or requires, in writing, an alternate time frame.”



Local Limits

EPA Guidance document for Local Limits analyses

EPA Local Limits
Development Guidance and
Appendices, July 2004

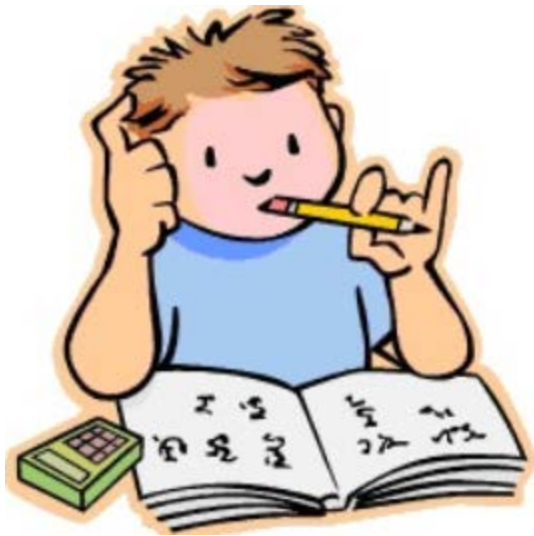




LL considerations for DEQ approval

What are the expectations?

I. Sampling and analysis plan





LL considerations for DEQ approval

II. Technical evaluation
of local limits.





I. Sampling and analysis plan

- Objective- The need for the sample plan
- Background- Information on current MAHL, MAIL, Local Limits and changes to POTW process and service area
- Pollutants for which sampling will be conducted



I. Sampling and analysis plan

- Data requirement for-
 - Influent Pollutant loading
 - Removal efficiencies
 - Inhibition thresholds
 - Industrial loading
 - Sludge loadings
 - Residential and commercial loadings





I. Sampling and analysis plan

- Sampling locations, (at the POTW, collection system or IU)
- Sampling methods (grab vs. composite, sludge)
- Sample frequencies (initial LL study or ongoing evaluation)
- Sample monitoring conditions



I. Sampling and analysis plan

- Analytical methods
- Flow data
 - Total POTW flow
 - From uncontrolled sources
 - From controlled sources (SIUs)
 - Sludge to digester
 - Sludge to Disposal
- Sample collection time line





I. Sampling and analysis plan

- Documentation of Sampling and analytical data
 - Field measurement records
 - Chain of custody
 - Lab reports
- Evaluation of analytical data
 - QA/QC

LOCAL LIMITS DATA COLLECTION WORKSHEET

DATE:

PLANT		CURRENT FLOWS	
Name:		Avg. DW influent flow, mgd:	
Plant Type: <i>eg: activated sludge</i>		Avg. Ind. User flow, mgd:	
Service Pop.:	NPDES No.:		
PLANT DESIGN DATA		STATE WQ STANDARDS, mg/l	
Population Equivalent:		Chronic	Acute
	Peak	Designated Use	
Design Flow, mgd:	Daily Avg, dry weather		
	Design Loadings, lb/d		
	BOD	TSS	NH3
avg.			
peak			
SLUDGE DISPOSAL			
Method:	<i>eg, Land Application</i>		
Avg flow to digesters:		mgd	
Avg daily disposal:		mgd	
Annual disposal:		dt/yr	
Avg % solids:			
Site Use, years:			
Site Size, acres:			

	Ag				
	As				
	Cd				
	CN				
	Cr				
	Cu				
	Hg				
	Ni				
	Pb				
	Zn				
	Mo				
	Se				
	other:				
	other:				
	other:				
	other:				



II. Technical Evaluation of Local Limits

What's needed in the local limits report?

1. Background information needed for LL study
 - POTW's population and design
 - Loadings (inf., eff., and sludge)
 - Operational and compliance history
 - IU flow and loadings
 - State WQ standards and permit limits



II. Technical Evaluation of Local Limits

2. POCs Determination

- EPA's 15 POCs
- POCs in last LL vs. proposed
- Added new POCs, why?
- Removed POCs, why?
- Discussion of total toxic organics



II. Technical Evaluation of Local Limits

3. Data collection-

- Same time frame
- From POTWs', uncontrolled and Controlled sources
- Background ambient monitoring
- Mixing Zone information
- Hauled waste data (if applicable)



II. Technical Evaluation of Local Limits

4. MAHL determining Criteria discussion

- Permit limits and/or WQ standards
- Process inhibition & sludge disposal options
- Other specific prohibitions per 40 CFR
Part 403.5(b)



II. Technical Evaluation of Local Limits

5. MAHL analysis

- Removal efficiency analysis
- AHL calculation for each criterion (inhibition, WQ std, biosolids)
- Discussion of data outliers and use of literature values, if applicable



II. Technical Evaluation of Local Limits

6. MAIL analysis

- Uncontrolled sources (domestic, non regulated commercial, stormwater, I&I...)
- Growth allowance and safety factor
- Hauled Waste (if accepted)





II. Technical Evaluation of Local Limits

7. Local Limits allocation

- Methods of allocation, uniform conc., IU contributory flow based, case by case, or mass proportion method.
- If contributory flow or case by case allocation, identify IUs and associated IU flow.



II. Technical Evaluation of Local Limits

Local Limits allocation cont.

- Discuss local limits for Non-conventional POCs and Total Toxic Organics
- List numeric limits for all POCs
- Discuss proposal to add or remove POCs



II. Technical Evaluation of Local Limits

8. Implementation

- How is the LL incorporated to the POTW's legal authority?
- Is the proposed local limit protective of the POTW's treatment system, workers health and Water Quality?



Overall LL approval process

In Summary –

- Contact PP Coordinator ahead of time
- Submit Sampling Plan for review
- Submit the LL report for preliminary review/approval
- Public notice, if substantial modification
- Final DEQ approval





Overall LL approval process

DEQ's Incorporation of the approved LL into the permit...

- If the POTW's NPDES/WPCF permit is active, LL will be incorporated into the permit via Permit Action Letter per 40 CFR 122.63(g)



Overall LL approval process

Incorporation of the approved LL into the permit...

- If the NPDES/WPCF permit is on administrative extension, DEQ will issue an approval letter and; local limits will be incorporated into the permit during next permit renewal.



Local Limits Evaluation



Questions?