

Waste load Allocation and Industrial Perspective

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·Understanding Sioux City's Pretreatment Program.

- Coordination between the City of Sioux City, Industrial Pretreatment Coordinator, and the individual industries that discharge to the Sioux City WWTP
- Major industrial Users (MIU) Quarterly Meetings
- Waste load allocations for new and current Industrial Users
- Environmental recognition program
- Specific work with industries in the community
- Surcharge treatability assistance
- New/current NPDES local permit issuance

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Coordination between the City of Sioux City, industrial pretreatment coordinator, and the individual industries that discharge to the Sioux City WWTP

- The following subjects will be covered individually:
 - Role of the Environmental Services Department (ESD) Manager, City of Sioux City
 - Role of the WWTP Industrial Pretreatment Coordinator (IPC)
 - Role of the Individual Industries

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Role of the ESD Manager, City of Sioux City

- Ensure that the Industry maintains compliance with their individual NPDES permit and with the overall Pretreatment Program
- Maintain requirements of the IDNR NPDES permit issued for the WWTP
- Build & maintain strong working relationships with WWTP staff and each of the industries
- Coordinate cooperative efforts toward safe and effective WWTP operations
- Establish billing and issue corrective actions

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Role of the WWTP Industrial Pretreatment Coordinator

- Liaison between the individual industries & ESD Manager
- Schedule sampling events
- Management of WWTP Laboratory (in-house and industrial sampling)
- Sampling of individual industries
 - The IPC visits the industries daily to record sampler temperatures and flows
 - Samples are observed daily and collected 3 times a week (random schedule)
 - A call is placed to the industrial contact if the sample looks atypical or there are issues with samples. Photos are also taken if contact is not made
 - When visiting sites, be observant to the industries' wastewater systems and note issues and/or possible solutions to assist them achieve better effluent
- Issue Notice of Violations (NOV's) (phone call prior to written notice by ESD)
- Assistance for wastewater and pretreatment issues with the ESD Manager, individual industries, IDNR, & EPA

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Role of the individual Industries

- Meet the guideline limits set in the NPDES for local pretreatment permits issued by the ESD
- Wastewater System improvements
- Attend Quarterly Major Industrial Users Meetings
- Ownership into the Program they each helped develop
- Notifications to the ESD & IPC:
 - Slug loading
 - Flow increases or decreases
 - Facility holiday closures
 - Issues associated with wastewater treatment system upsets
 - Mother nature events
 - Increase in production by 10% or more
 - Unscheduled Clean ups
 - SPCC compliance
 - Any significant event that may affect the city's WWTP

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Major industrial Users (MIU) Quarterly Meetings.

- ESD will schedule meetings once a quarter.
- Industries, contributing towns, and city staff are invited to attend.
- Topics of discussion at the meetings include:
 - Pretreatment program
 - Odor control
 - WWTF upgrade status/developments: Plant is currently in Phase 1 of construction, Phase 2 is being designed per new NPDES permit requirements
 - Operation of the WWTF
 - Rate increases: Proposal of FY 2008 increase 25.75% (1 July 07), and FY 2009 increase of 25.5% (1 July 08)
 - Other potential limits within 5-10 years; TKN, CL-, TDS, and Phosphorus
 - Open forum for discussion

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Waste load allocations for new and current Industrial Users.

- Secondary treatment Design flow- 30-44 MGD
- Current Average Daily flow- 15 MGD (approximately)
- 19 daily major industries monitored
- Current NPDES permit holders limits are checked and verified with past violations, production increases, and process enhancements. If no major permit changes are required permit limits do not change.
- New industries fill out an Base line monitoring Report with the BOD,TSS, O/G, and Flow averages
- IPC and EC will calculate a 3 month temporary NPDES permit for discharge to the WWTF
 - Calculations are 2.5 times the daily average for Daily Maximum pound limit
 - Calculations for 30 day average are 75% of the calculated daily maximum limit

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Environmental Recognition Program

- All industries are monitored Daily for permit violations
- Industries that achieve 1 quarter with no NOV's
 - Letter of achievement from the ESD, City of Sioux City, signed by city and IPC
- Industries that achieve 4 consecutive quarters with no NOV's
 - Letter of achievement from the ESD, City of Sioux City, signed by the ESD Manager, IDNR regional inspector and the IPC
 - Proclamation from the City Council of Sioux City
 - Plaque presented to the individual industry at a City Council meeting, (industries located in NE & SD are presented additionally at their local council meetings)
 - Some industries recognize 1 year achievement with their bonus initiatives (Gelita has received a two year award for no NOV's and are currently working on achieving the 3 year mark.)

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Specific work with industries in the community

- When industries are struggling w/meeting NPDES permit limits
 - IPC
 - Will work with the industrial contact to help resolve the issue and present his/her findings to the ESD Manager
 - Plant upsets
 - Slug loads
 - Sampling malfunctions
 - Sewer issues
 - Flow issues
 - Coordinate meeting, if necessary with the ESD Manager
 - ESD Manager
 - Work with the IPC to resolve the issue that works with both the WWTP and the specific industry
 - Meet with the industry to hear the specific issues at hand (if necessary)
 - Individual Industry
 - Research NOV issues and find the cause
 - Entertain the suggestions of the IPC and research new ideas for solving NOV issues
 - Notification to ESD & IPC for production/WW modifications
 - Be proactive with new ideas & technologies

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Example of Surcharge Treatability

- NOV charges with industries are tracked on a yearly basis
- Treatability is offset from NOV charges so the WWTP doesn't lose money for wastewater treatment costs
- City will normalize cost of treatment to set remainder after treatability
- Example:

Month	Surcharges	Remainder after Treatability
· June	\$125.75	\$99.86
· July	\$278.98	\$278.98
· August	\$586.33	\$523.67
· September	\$847.76	\$823.25
· October	\$47,567.40	\$47,567.40
· Total	\$49,406.22	\$49,203.16

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Industrial cooperation

- **Research found that the DAF needed upgrades and a Roto Screen added to achieve permit limits**
- Industry installed upgrades and Roto Screen at a cost of \$175,000.00
- **Industry provided documentation of purchases and photos of the upgrades installed and that upgrades are functioning properly**
- ESD instructs the IPC to credit billing sheet for improvement credit
 - Total credit of \$49,203.16
 - Credited on billing each month for 12 months or \$4,100.26/month Credit
- **IPC places the improvement credit on the billing per direction of ESD**
- Industrial cost receives a portion of the NOV's already paid to Sioux City back as credit on current month wastewater billing

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