

OPS SQL / Wastewater Treatment Plants

Here is the central storeroom for all your information

A database designed specially for Wastewater Utility Data Management. It has all the tools you need to manage your processes, including industry specific: Calculations, F/M, SRT, CT Calcs, Wasteload, Reports: NPDES, DMR, eDMR, MOR

What do you want to track? Dosages, surface loading rates, detention times, calculations... Create the variables that are unique to your process. Build a database that not only defines a name, units and tracking frequency, but the tabs show describe various attributes of the variable. This allows you to control the use of the data for any requirement you or regulatory agencies may desire.

Options include data approval and PDA Controls. **MDL Rules** are applied to how results are reported. **Interfaces** define automatic data entry. Regulatory and control **Limits** can be applied for reporting and statistical analysis. **QC** is used to create control chart graphs. **Lists** give you standardization for reporting text. **Equation** has over 140 wastewater specific math functions.

Edit/View Variables

Info... Var # 529

Name Coagulant Day Tank Usage Units Lbs

Track every Day Type Parameter Read-Only

Options User Defined MDL Rules List LIMS Interface

Description Limits Optional Print Quality Control Equation **Interface**

Signal Tag (Node:Tag.Field) Statistic Scale Factor

COAG_AID:DAY_TNK_LVL.PNT ? Inventory 571.3261

Start Time Stop Time

00:00 (hh:mm) 23:59 (hh:mm)

Same Day as Start Day After Start

Filter

Low Range None

High Range None

Deadband None

Filter Data

Collect data when:

Node: Tag.Field

=?=0

SUPER (1/16/2005 7:06:25 AM) VARID : 98

Variables to track

- Parameters
- Calculations
- Text
- Chain of Custody
- Audit trail

Data in

- SCADA
- Laboratory
- PDA
- Tablet PC
- Manual
- Bench Sheets

Information out

- Reports
NPDES, eDMR, DMR...
- Analysis
Trend, Correlation,
Probability

The Power of Information

Bring all your SCADA, Laboratory and operator log data together and transform it into information.



Data In

To manage your processes, the information you'll need comes from three sources: **SCADA, Laboratory and Field**. Much of the data input can be automated saving both time, and, more importantly, errors. Data integrity is further enhanced by approval controls and audit trail. Besides the Interfaces to SCADA and Lab files, OPS provides PDA and Tablet PC solutions. Manual data entry is made efficient by providing a variety of data entry forms which can be easily be customized and assigned to personnel based on the security level and job function.

BOD Manager

Sample Date: 01/01/1999 Incubation Period: 01/02/1999 to 01/06/1999 Last Revision: 06/26/1998

	Influent		Primary Eff		Final DO (mg/l)	Dil %	O2 Depl. (mg/l)	Seed Factor (mg/l)	BOD (mg/l)	Final BOD (mg/l)
	After Drying	After Burning	After Drying	After Burning	5.78	1.00	2.92	0.00	292.00	279
Sample & Dish	22.0421 g	22.0295 g	22.0316 g	22.0278 g	4.21	1.67	4.45	0.00	267.00	
Dish (Tare)	22.0213 g	22.0213 g	22.0202 g	22.0202 g	7.11	3.33	1.61	0.00	48.30	
Total Suspended Solids	0.0208 g	0.0082 g	0.0114 g	0.0076 g	6.05	16.67	2.16	0.00	12.96	13
Size of Sample	100 ml	100 ml	100 ml	100 ml	5.33	25.00	3.12	0.00	12.48	
Total Suspended Solids	208 mg/L	82 mg/L	114 mg/L	76 mg/L	5.88	16.67	2.56	0.00	15.36	15
Solids Lost During Burn (Volatile Solids)	0.0126 g		0.0038 g							
Volatile Solids	126.00 mg/L		38.00 mg/L							
% Volatile Solids	60.58 %		33.33 %							

Add-on Modules/Interfaces

LAB Cal is a scheduling program that displays Lab orders on a calendar, shows tests to be run and records chain-of-custody.

GnR Server runs an NT service that allows automatic publishing of OPS SQL reports and graphs.

Pocket OPS allows you to use collect data from the field on a PDA. Then simply sync the data to the OPS SQL database.

OPS SQL Remote allows remote users to collect data on any disconnected PC or Tablet PC. Data entry forms and **LAB Cal** sampling work just like they do in **OPS SQL**.

SCADA Interface allows you to build a bridge to your SCADA/HMI/HIST to automatically summarize and collect this data.

LIMS Interface allows you to build a bridge to your Laboratory Information Management Software or even to an outsourced commercial lab.

Information out

Now you can turn information into action and improved performance of your operation.

REPORTS: Most of your regulatory report templates are already in the program including eDMR. Ad hoc reports can be designed in minutes. Your people can get the information they need when they need it.

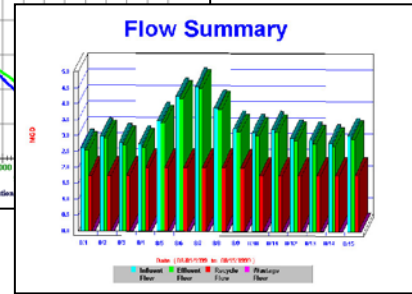
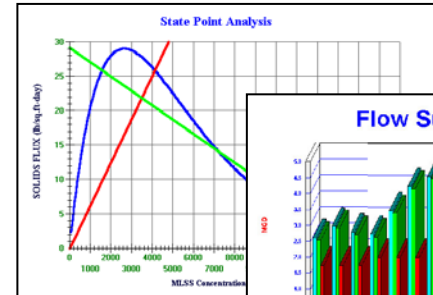
NATIONAL POLLUTANT DISCHARGE ELIMINATION ACT (NPDES) DISCHARGE MONITORING REPORT (DMR) (40 CFR 122.41)

WATER QUALITY CONTROL DISTRICT: ROCKY CREEK VILLAGE OF
 ADDRESS: ROCKY CREEK WASTEWATER TREATMENT PLANT
 CITY: MILWAUKEE, WI ZIP: 53204-0000
 COUNTY: ROCKY CREEK WASTEWATER TREATMENT PLANT
 LOCATION: JOHN CORNER

REPORTING PERIOD: 06/01/98 to 06/30/98
 REPORT DATE: 06/30/98

COMBINED TREATED PROCESS (SUDR MS) Form Approved: 12345
 F. FINAL OMB No. 2040-0004 Approval Expires 05-31-00
 MUNICIPAL, NO PRE-TREATMENT TAILPOND *** NO DISCHARGE ***

PARAMETER (40 CFR)	UNIT	AVG	MAX	MIN	AVG	MAX	MIN	NO. OF SAMPLES	AVG	MAX	MIN	NO. OF SAMPLES	AVG	MAX	MIN	NO. OF SAMPLES	AVG	MAX	MIN	NO. OF SAMPLES
BOD, 5-DAY (20 DEG. C)	MG/L	419	4513					19				0								
00310 0 0 RAW SEWAGE/FLUENT																				
BOD, 5-DAY (20 DEG. C)	MG/L	633	2207					24				3								
00310 1 0 0 EFFLUENT GROSS VALUE																				
PH		6						12				0								
00400 1 0 0 EFFLUENT GROSS VALUE																				
BOD, 5-DAY (20 DEG. C)	MG/L							24				19								



GRAPHS: Analyze trends, correlations, probabilities. Create control charts. Process modeling tools show the relationship between production and clarifier loading.

Products

OPS SQL Enterprise for large operations needing more than 10 concurrent users, running Oracle or MS SQL Server and managing one or multiple facilities.

OPS SQL Professional for medium to large operations needing 1-10 concurrent users, running Oracle or MS SQL Server and managing one or multiple facilities.

OPS SQL Express for small to medium size operations needing 1-5 concurrent users, managing one or more facilities, tracking up to 32000 variables per facility database, with data storage requirement of less than 2-gigabytes per facility. MSDE database supplied.

OPS SQL Lite for single computer operations, tracking less than 300 variables in a single 2-gigabyte facility database, no security requirements. MSDE database supplied.