Data Management and Compliance Tracking

Control Authorities hold a unique position in that as pretreatment program "regulators", Control Authorities are also part of the "regulated community". That is, a Control Authority with an approved pretreatment program must regulate its IUs and is required, as a condition of its wastewater discharge permit, to implement and enforce its approved program. DEP routinely audits/inspects Florida Control Authorities to evaluate the effectiveness of their approved pretreatment program implementation and enforcement activities.

This dual regulatory responsibility requires that Control Authorities handle, maintain, and organize large volumes of information and data. Depending on pretreatment program size, the amount of data managed can vary widely. The largest programs typically require sophisticated automated data management systems in combination with a paper filing system while smaller programs may require only a paper filing system. In either case, the Control Authority must be aware of the specific types of data that must be collected and maintained as well as the decisions that are necessary for ensuring that these data are interpreted correctly. Pretreatment program data can be grouped into two types: IU-specific and programmatic data.

IU-Specific Data

For each IU, the Control Authority must determine what data are legally required or needed, as well as when and how they can be obtained. IU-specific data includes information that is compiled from the implementation and enforcement of program activities related to IU discharges and includes:

- IU Inventory [Subparagraphs 62-625.500(2)(b)1.-3. and Paragraph 62-625.500(2)(e), F.A.C.]. Pretreatment Control Authorities must identify, classify, and notify all IUs of applicable standards and requirements. The inventory should include the name, location, classification, applicable standards, basis for limits imposed, volume of discharge, character and volume of pollutants contributed to the WWF, control mechanism status, compliance dates and any other special requirements for each IU.

  The industrial waste survey (see Chapter 5) should provide most of the information required for developing the inventory, although some supplementary information might be required from other sources, such as the permit application or monitoring data. Water use records, telephone directories, local business directories, chamber of commerce listings, etc. are used typically to compile an initial list whereby pretreatment program personnel may then survey IUs to collect general facility information (see Chapter 5).

The inventory of IUs must be updated annually to add new IUs, modify information for existing IUs, and remove IUs that are no longer in business or have halted discharge. Data that may be maintained as part of the IU inventory are detailed in Appendix 8-A. A routine schedule and an identified process for updating the inventory of IUs should be implemented, including the specific data available concerning each user. Responsibility for maintenance of the inventory should be assigned to one specific individual or group (such as the data management staff) and the flow of information within the Control Authority should be organized to ensure that all relevant data are directed to that group.

Cover page

- Permit number
- Facility name and site address
- Effective/expiration date
- Industry information
  - ◊ General process description
  - ◊ Wastestream description
  - ◊ Pretreatment system discription
- Other (e.g., re-application deadlines)

Effluent limitations

- Monitoring location and description
- Parameter
  - ◊ Limitation
    - Value
    - Unit
    - Type

Monitoring and reporting

- Monitoring requirements
  - ◊ Self-monitoring reports
    - Sample type
    - Self-monitoring frequency
    - Analytical methods
    - Required BMP status
  - ◊ 24 hour notification
  - ◊ Resampling
  - ◊ Additional monitoring
- Permittee requirements
  - ◊ Notices and reports
  - ◊ Plans

Special conditions

- Monitoring waivers
- Reduced reporting
- Best management practices
- Payment of fees
- Slug Control Plans

Standard conditions

Fact sheets, permit applications and permit modification history

Exhibit 8-1, Fundamental IU Permit Data

- IU Permits [Subparagraph 62-625.500(2)(a)2., F.A.C.]. Control Authorities are required to control all IU discharges to the WWF to ensure compliance with applicable pretreatment standards and requirements. The regulations specify that SIUs must be issued individual or general control mechanisms, e.g., permits (see Chapter 6). Permits define conditions and reporting requirements specific to the IU, are issued for a defined period of time, and may be reissued or periodically modified to reflect anticipated or changed conditions. It is also recommended that Control Authorities require permit applications and complete permit fact sheets for each permit. The basic data elements of a permit are detailed in Exhibit 8-1.

IU type	Minimum Reporting Requirement
SIUs	**2 times per year**
CIUs	**2 times per year**
NSCIUs	**Not required**
Middle Tier CIUs[1]	**1 time per years**

Exhibit 8-2, Minimum reporting requirements

- IU Reporting [Subparagraph 62-625.500(2)(b)4., F.A.C.]. Control Authorities must identify reports required of each IU (see Appendix 8-B), determine report deadlines, track submission dates, evaluate submissions for compliance with requirements/standards, and notify IUs of

violations, deficiencies and/or missed deadlines. The minimum reporting requirements for industrial users is provided in Exhibit 8-2.

- Inspections/Monitoring [Subparagraph 62-625.500(2)(b)5., F.A.C.]. Control Authorities are required to determine, independent of information supplied by IUs, compliance with applicable pretreatment standards and requirements. As noted in Chapter 7, Control Authorities must both sample and inspect all SIUs at least annually. Information collected by Control Authorities during IU inspections varies
- but likely contains types of information identified in Exhibit 8-3.

Basic information	**Slug control plan**
• IU inspected • Date/time of inspection • WWF personnel • IU personnel Type of inspection	Needed? Y or N Reason needed **Observations and findings** **Control Authority actions** Follow-up required

Exhibit 8-3, Basic IU Inspection Data

The Control Authority should develop checklists for the inspection so the data remains consistent. For sampling, results must be evaluated for IU compliance with discharge standards, requiring that monitoring documentation be maintained such that these data are admissible in any enforcement actions. These types of data collected for sampling events are summarized in Exhibit 8-4.

- Enforcement [Subparagraphs 62-625.500(2)(a)5. and 62-625.500(2)(b)7., F.A.C.]. Any IU noncompliance with discharge standards, reporting requirements, or deadlines, requires action by the Control Authority. To perform adequate enforcement, Control Authorities must track the types and dates/time frames of violations, the dates and types of enforcement actions, required IU actions and time frames, and the compliance status of the IU [including identification of instances of Significant Noncompliance (SNC)-see Exhibit 8-5]. As required in Paragraph 62-625.500(2)(d), F.A.C., these actions must be consistent with the public utilities' approved Enforcement Response Plan (ERP). Data typically tracked for each IU as part of enforcement activities is detailed in Exhibit 8-6. An example of how a Control Authority may maintain this data is provided in Appendix 8-C.

General IU information
- Sampling location
- Type of sampling event (e.g., SIU, Control Authority)
- Reason
- Flow
- Production volume(s)

Sample specific
- Collection method type
- Date(s) and time(s) collected
- Identity of person(s) collecting sample
- Parameter
  - ◊ Collected and handled properly
  - ◊ Analytical techniques/methods used
  - ◊ Date (and time) analyzed
  - ◊ Identity of testing laboratory and analyst(s)
  - ◊ Analyzed properly?
  - ◊ Result/Units
  - ◊ Certification
  - ◊ Failed to sample?

Exhibit 8-4, Basic Sampling and Analysis Data

An industrial user is in significant noncompliance if its violation meets one or more of the following criteria:

A. Chronic violations of wastewater discharge limitations defined here as those in which sixty-six percent (66%) or more of all the measurements taken during a six-month period exceed (by any magnitude), a numeric pretreatment standard or requirement, including instantaneous limits.
B. Technical Review Criteria (TRC) violations defined here as those in which thirty-three percent (33%) or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits, multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, total oil and grease, and 1.2 for all other parameters except pH).
C. Any other violation of a pretreatment standard or requirement (daily maximum, long-term average, instantaneous limit, or narrative standard) that the Control Authority determines has caused, either alone or in combination with other discharges, interference or pass through, or endangers the health of WWF personnel or the general public.
D. Any discharge that has resulted in the control authority's exercise of its emergency authority under Sub-subparagraph 62-625.500(2)(a).5.b., F.A.C., to halt or prevent such a discharge.
E. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a control mechanism or enforcement order for starting construction, completing construction, and attaining final compliance.
F. Failure to provide, within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules.
G. Failure to accurately report noncompliance.
H. Any other violation or group of violations, including a violation of best management practices, which the Control Authority determines will adversely affect the operation or implementation of the pretreatment program.

Exhibit 8-5, Definition of Significant Noncompliance (SNC), Subparagraph 62-625.500(2)(b)8, F.A.C.

Noncompliance committed

- Effluent limitations
  - ◊ Date violation(s) identified by Control Authority
  - ◊ Parameter in noncompliance
  - ◊ Date/period of noncompliance (i.e., mm/dd/yy, mm/yy, or period (e.g., 01/01/98-06/30/98))
  - ◊ Limitation violated (e.g. either the type of limit (i.e., instantaneous, daily maximum, monthly average, 30-day rolling average, 4-day average) or the actual value.)
  - ◊ Severity of violation
    - Simple
    - Technical review criteria (TRC)
    - Sub-subparagraph 62-625-500(2)(b).8.a-c, F.A.C.
- Deadlines
  - ◊ Date violation(s) identified by Control Authority
  - ◊ Type
  - ◊ Compliance schedule activity
  - ◊ Report, Plan, Notification
  - ◊ Severity
    - Simple
    - Sub-subparagraph 62-625-500(2)(b)8.e., F.A.C.
    - Sub-subparagraph 62-625-500(2)(b)8.f., F.A.C.
- Other
  - ◊ Date violation(s) identified by Control Authority
  - ◊ Type (e.g., failed to monitor, failed to perform complete self/re-monitoring, failed to provide certification with report, failed to meet signatory requirements, failed to comply with record keeping requirements, failed to maintain monitoring location, failed to comply with proper sampling protocols and analytical methodologies, falsified information, diluted wastestream to achieve compliance, failed to meet any permit conditions.)
  - ◊ Severity
    - Simple
    - Sub-subparagraph 62-625-500(2)(b)8.d., g.-h., F.A.C.

Enforcement action

- Type
- Date taken
- Control Authority representative/official
- IU response required
  - ◊ Activities
  - ◊ Deadline for completion

IU response (adequacy should be addressed)

Exhibit 8-6, IU Enforcement Data

IU-specific records must be maintained so that they are readily accessible. It is recommended that the Control Authority maintain separate files for each IU. Some utilities have opted to file similar records together for all businesses (e.g., a permit file, inspection file, etc.) but this method has been shown to be less efficient, particularly for Department oversight. Files may be kept in binders or in folders, with a defined file organization. The Department recommends the following items be maintained on file for each permitted IU.

- Permit (and official addendums)
- Original and modified application and fact sheet, to include diagrams made with the submittal or a page directing a person to where diagrams are located
- Baseline Monitoring Reports [BMR(s)] (sample BMR and checklist provided in Appendix 8-D)
- Signatory authorizations and certification statements (example format provided in Appendix 8-E)
- Slug control plan with diagrams when these plans are determined to be required by the CA (example format provided in Appendix 8-F), or the documentation that the need for a slug control plan was evaluated by the CA at a frequency of every two (2) years minimum, and other plans, e.g., Toxic Organic Management Plan (example format provided in Appendix 8-G), Solvent Management Plan.
- Control Authority monitoring (to include field data record and lab report)
- Periodic Compliance Reports (PCRs), including self-monitoring (example format provided in Appendix 8-H)
- Correspondence (to and from IU)
- Inspection reports
- Meeting summaries
- Phone logs
- Enforcement
- Waste logs
- Surcharge (if applicable, to include bills and credits)
- Miscellaneous information

The first five items shall remain as part of the file until the specific document is no longer applicable. Updates to the first five items may be placed in the original and the old page removed. Replacement pages should be annotated in some fashion to indicate they were not part of the original submission. The removed pages must be retained, but may be marked "VOID" or otherwise annotated to indicate they are no longer valid. All other records may be archived periodically, but must be retained a minimum of three years in accordance with Paragraph 62-625.600(14)(c), F.A.C.

Records containing confidential business information (see Rule 62-625.800, F.A.C.) must be labeled as such and maintained separately to prevent access by unauthorized personnel and the public. A note should be made in the file that confidential information is kept on file elsewhere.

Management of data is not limited to maintaining IU files. Be it manual or automated, proper data management requires that data and information be evaluated appropriately. Control Authorities

must evaluate IU compliance with deadlines, reporting requirements, and pretreatment standards, bearing in mind that compliance evaluations are not limited to permitted IUs (e.g., general and specific prohibitions applying to all IUs, IUs subject to new categorical pretreatment standards required to submit a BMR, etc). While deadline and reporting evaluations are relatively straightforward, sampling results may have to be averaged, combined, or converted to mass based units, or averaged, prior to comparison against pretreatment standards. Definitions of key pretreatment terminology, necessary to perform basic calculations to evaluate IU compliance with applicable standards, are provided in Appendix 8-I.

In accordance with Sub-subparagraphs 62-625.500(2)(b)8.a. and b., F.A.C., pretreatment data are evaluated in six-month rolling increments, to determine if the IU is in Significant Noncompliance (SNC). Control Authorities must also evaluate timeliness of submission of reports and completion of compliance schedule activities, categorizing the more severe noncompliance as SNC (i.e., Sub-subparagraphs 62-625.500(2)(b)8.d. and e., F.A.C.). Similarly, other instances of IU noncompliance, (e.g., WWF interference) may classify an IU to be in SNC). A summary of compliance evaluation considerations is provided in Appendix 8-J. A sample form used for tracking IU compliance is presented in Appendix 8-K. An exercise using the sample form is provided in Appendix 8-L.

Programmatic Data

While IU data are typically the major focus of pretreatment program data management, Control Authorities generate general pretreatment program data that also need to be managed and maintained properly. Because this information forms the basis of a Control Authority's pretreatment program, it is essential that it is kept up-to-date and is readily accessible to program staff and to Department representatives. General program data may include:

- Wastewater Discharge Permit - A Control Authority's pretreatment program implementation and enforcement responsibilities are detailed in its discharge permit(s), requiring that new requirements of and modifications to the Control Authority's pretreatment program be incorporated in its permit(s), if necessary. Key permit conditions and requirements that the Control Authority should track as part of its pretreatment program are summarized in Exhibit 8-7.

- Permit expiration date
- Permit reapplication deadline
- Discharge permit limitations
- WWF influent, effluent, and sludge monitoring frequency and data
- Due dates for compliance schedule activities, local limits re-evaluations, program modifications, etc.
- History of wastewater discharge permit violations

Annual Control Authority pretreatment program report requirements and due date

• Approved Pretreatment Program - As part of pretreatment program development, a Control Authority must establish legal authority and develop specific procedures to implement and enforce its approved program. This process, compiled as the approved pretreatment program document, outlines the specific authorities and procedures of the Control Authority. That document will include information such as:

◊ Sewer Use Ordinance (SUO)
◊ Multijurisdictional agreements (MJA)
◊ Industrial waste survey (IWS)
◊ Enforcement Response Plan (ERP)
◊ Local discharge limitations (with development procedures)
◊ Plan for control of IU discharges
◊ IU inspection protocols
◊ Wastewater sampling procedures
◊ Methods for IU report reviews
◊ Strategy for investigating noncompliance
◊ Public participation activities.

Further, the approved program document must detail the Control Authority's organizational structure, program staffing requirements, equipment and resource availability, program costs, and funding sources to support the pretreatment program. [See Subsection 62-625.500(3) and Sub-subparagraphs 62-625.500(4)(a)3.-4., F.A.C.]

Changes to the approved pretreatment program, whether caused by the Control Authority or as a result of changes in Federal or Florida regulations, may necessitate DEP approval of the program modification. Subsection 62-625.540(2), F.A.C. defines substantial program modifications (see Exhibit 8-8) and requires that POTWs submit these changes to the Department for review and approval. The Department is not required to approve any non-substantial program modifications, but these changes must be submitted to the Department at least 45 days prior to implementation of the change.

Control Authorities should retain documentation of all pretreatment program modifications (substantial and non-substantial), the reason for each modification, the date that the Control Authority submitted proposed modification to DEP, DEP's response to the proposed modification, the date that the regulations and/or procedures were revised, and the date that the changes took effect. DEP audits and inspections of Control Authority pretreatment programs typically will evaluate whether the Control Authority implemented and enforced program modifications in a timely manner and followed appropriate procedures (i.e., Rule 62-625.540, F.A.C.).

- **Changes** to the Control Authority's legal authority
- **Modifications** that result in less stringent local limits, except for pH and reallocations that do not increase total industrial loading for a pollutant;
- **Changes** to control mechanism (e.g., IU permit);
- A **decrease** in the frequency of IU self-monitoring or reporting;
- A **decrease** in the frequency of IU inspections or sampling by the Control Authority;
- **Changes** to the Control Authority's confidentiality procedures; and

Any other modification designated as substantial by DEP if the modification would have a significant impact on the operation of the Control Authority's pretreatment program, could result in an increase in pollutant loadings at the WWF, or could result in less stringent requirements being imposed on IUs.

Exhibit 8-8, Substantial Program Modifications

- Legal Authority - A Control Authority's legal authority to implement and enforce pretreatment program requirements is generally contained in a local SUO or district "rules and regulations". A Control Authority may have to periodically revise its local regulations to incorporate revisions to its legal authority. In certain instances, the Control Authority may have to establish additional legal authority not included in the original pretreatment program submission (e.g., multijurisdictional agreements or local limits for a new WWF).

The Control Authority should retain copies of all changes made to its legal authority, documentation of DEP notification and response (including dates), and any additional revisions made in accordance with DEP comments. In certain instances, the Control Authority may find a need to track dates of legal authority submissions to DEP along with subsequent approval/disapproval dates, effective dates of legal authorities, public hearing dates, and any other dates or requirements that may be imposed upon the Control Authority related to its legal authority to implement and enforce its pretreatment program.

- Local Limits Development - Control Authorities are required to evaluate the need to develop and implement local discharge limitations to control contributions from non-domestic sources, and periodically reevaluate and revise local limits as necessary. Wastewater facility monitoring data used in performing the evaluation is typically maintained in electronic format, the following data are needed for the local limits evaluation process:

◊ *Background Information* - Description of the Control Authority and its service area including influent (actual and design), effluent, and sludge flow rates (to treatment and disposal); wastewater flow rates received from domestic/commercial, industrial, and hauled waste sources; infiltration and inflow; receiving stream flow rates, water classification, and designated uses; and IU pollutant sources.

◊ *Monitoring Data* - WWF influent, effluent and sludge, domestic/background, industrial, hauled waste, and receiving water data. Also, dates and locations of sample collection, sample types, and sampling and analytical procedures used (including detection limits achieved) should be maintained.

◊ *Environmental Criteria* - All applicable criteria including wastewater discharge permit limits, water quality standards or criteria, sludge disposal limitations, inhibition values, and worker

health and safety concerns related to effects from explosions, inhalation of hazardous or toxic vapors and gases, or dermal exposure.

◊ *Calculations* - Calculation of removal efficiencies (primary treatment, secondary treatment, and overall plant), including equations and assumptions as necessary to document the approach used to evaluate local limits. The calculation of total allowable headworks loadings (TAHLs) and maximum allowable industrial loadings (MAILs) are an integral part of the evaluation process. The Control Authority must also document the approach used to allocate the TAHLs and MAILs including the selection of a safety factor, as deemed necessary.

• Annual Reports - Control Authorities must provide reports to the DEP, at least annually, describing pretreatment program activities during the previous 12 months. As part of the annual report submission, Control Authorities must identify all new IUs subject to the pretreatment program. Identification of these IUs, most notably SIUs, requires Control Authorities to periodically review water use records, business directories, telephone books, chamber of commerce records, etc. Procedures used and final determinations should be documented to demonstrate compliance with the procedures established as part of the Control Authority's approved pretreatment program.

• DEP Enforcement Actions - Control Authorities that fail to fulfill pretreatment program requirements pursuant to their approved pretreatment program and wastewater permit may be subject to enforcement action by DEP or EPA. The Control Authority should maintain full documentation of enforcement actions including date received, all actions taken in response to the enforcement action, and any phone conversations, meetings, or correspondence with respect to the action.

• Miscellaneous Control Authority Activities - Documentation of program activities need not be limited to the information described above. For example, any interaction between the Control Authority and DEP, EPA, or IU should be documented. Similarly, the Control Authority should maintain records of outreach activities conducted such as monthly newsletters, IU workshops, public awareness seminars, etc.