Industrial Waste Surveys

A complete and up to date Industrial Waste Survey (IWS) provides the backbone of a local pretreatment program and serves the following functions:

- allows a public utility to determine which users need to be regulated by the program and therefore affects the resources dedicated to the program;
- provides the basis for determining which users are subject to categorical pretreatment standards; and
- Informs the utility of the character of the wastes being discharged to the WWF, thereby providing the basis for local limits for specific pollutants.

Florida regulations [subparagraph 62-625.500(2)(b)1., F.A.C.] require public utilities to identify and locate all possible Industrial Users (IUs) that might be subject to the pretreatment program. An IU is defined as a source of discharge [Subsection 62-625.200(8), F.A.C.]. "Discharge" is defined as the introduction of pollutants into a WWF from any nondomestic source regulated under F.S. Chapter 403 [subsection 62-625.200(6), F.A.C.]. Pretreatment regulations impose additional requirements for any IU determined to be a Significant Industrial User (SIU). The definition [subsection 62-625.200(25), F.A.C.] of what classifies an IU as an SIU is:

- any user subject to categorical pretreatment standards;
- any user that discharges an average of 25,000 gallons per day or more of process wastewater (excludes sanitary, noncontact cooling, and boiler blowdown wastewater);
- any user subject to categorical pretreatment standards, but determined by the control authority to be a non-significant categorical industrial user;
- any user that contributes a process wastestream making up 5 percent or more of the average dry weather hydraulic or organic capacity of the WWF treatment plant; or
- any other user designated by the public utility to be a significant industrial user because of its reasonable potential to adversely affect the WWF's operation or violate any pretreatment standard or requirement.

In addition (as part of their annual report), paragraph 62-625.600(8), F.A.C. requires a Control Authority to update their list of IUs annually <u>and</u> to detail standards that apply to each IU (including SIUs). To comply with these requirements, the public utility must develop and implement sound procedures to conduct an industrial waste survey.

The first step in maintaining an inventory of IUs is to develop a system to identify <u>all</u> industrial and commercial users that potentially discharge to the WWF. Suggested sources that may be used in creating an initial master list include:

- Water and sewer billing records
- Applications for sewer service
- Local telephone directories
- Chamber of Commerce records
- Local business directories
- Business or occupational license records

- Wastewater collection personnel
- Field observations
- WWF treatment plant operators
- Business associations
- Internet
- Local Fire Department

For existing programs, surveying current permittees about known competitors may facilitate identification of SIUs. Contributions to the WWF may also come from connections outside the public utility's jurisdiction. Although local regulations may require all IUs to apply for a permit, it is still the responsibility of the public utility to identify and locate all SIUs.

To facilitate classifying users, the public utility should distribute an industrial waste questionnaire. The questionnaire should request general and specific information of potential industrial and commercial users. A two-part questionnaire may be preferred by public utilities: a basic questionnaire (Appendix 5-A) sent to all initially identified IUs, followed by a more specific questionnaire for IUs that may be subject to the pretreatment program (examples are provided in Appendix 5-B). The basic questionnaire should, at minimum, request the following information:

- Industry name, mailing address, location of facility, and contact person's name and phone number
- Type of business, processes performed and products manufactured
- NAICS code
- Business hours
- Number of employees
- Sewer service
- Water source(s) and average usage
- Type of wastewater discharged (i.e., sanitary, process, noncontact cooling, boiler blowdown) and discharge location(s).

A more detailed questionnaire should be distributed to those users that are likely to be subject to the pretreatment program. This form should request information regarding, at least, the following:

- Detailed description of processes performed, where water is used and where waste is generated
- Process chemicals used and chemicals located onsite
- Applicable categorical standards
- Schematic including process area, pretreatment system, floor drains, and connections to sewer
- Number of sewer connections, location of discharge lines conveying industrial waste (including access for monitoring), etc.
- Description of pretreatment facilities and practices
- Pollutants present in waste discharged to the WWF (including sampling data where possible)
- Residuals generated and disposal methods
- P2 measures and environmental control permits held.

A public utility will not know if a questionnaire was lost in the mail or was not delivered to the intended recipient unless it was sent in a manner confirming receipt (e.g., certified mail - return receipt requested, hand delivery). Tracking information as such is necessary in the event that enforcement actions must be taken against a user who refuses to respond.

A cover letter (example provided in Appendix 5-A) should accompany the questionnaire explaining its importance, who to call with questions, where and when to return the questionnaire, who should sign the questionnaire, etc. The public utility also may choose to outline the penalties that can be assessed for failing to respond and advise the user to make a copy of the complete questionnaire for their records prior to returning the original. It is recommended that 30 days be allowed for the user to respond.

Confirmation of when the questionnaire was delivered and returned should be tracked. For those questionnaires that were returned as "undeliverable", the public utility may follow-up by attempting to contact the user by phone or in person. For those users who failed to respond a phone call and/or visit with a letter notifying the user of the noncompliance is advisable. [Remember, that occasionally mail may be lost so never assume that the user failed to respond. Merely indicate that the completed questionnaire was never received making it necessary for the public utility to follow-up. If the user followed the instructions detailed in the cover letter, they should have a copy of the completed questionnaire on file making it possible to provide the information immediately. Providing a blank questionnaire with a requirement to return the survey within a short period of time (e.g., five days) may be necessary for users who admit they did not respond or have no proof that they responded.] Closure for each user should be achieved even if the public utility determines that a specific user does not exist.

Once returned, questionnaires should be reviewed with the information verified where possible. In particular, field verification may be necessary in the following situations:

- When the questionnaire states that no process wastewater is discharged, but the reported wastewater flow is not accounted for by number of employees, noncontact cooling water, etc.;
- When the questionnaire indicates categorical (or potentially categorical) operations but no sewer service, zero discharge to the WWF, and/or no waste hauled off site; and/or
- Whenever the information reported appears unreliable.

Verification of information provided by the user may require a site visit to the facility to determine whether all processes were described and all discharges correctly reported. This verification process may also require the public utility to collect samples.

Users, not identified as SIUs, will need to be notified of such and what standards and requirements apply to their discharge. It is suggested that a letter be provided detailing their status (user or industrial user) and the basis for the determination (i.e., information provided in the questionnaire and/or walkthrough performed). The letter should also provide them with a copy of the local regulations or the section(s)

outlining standards and requirements applying to their discharge. The public utility may also choose to define SIU and list who the IU may call in the event they believe they were classified incorrectly.

The public utility shall briefly describe when and why a user was "dropped" from the survey process. This can be included in the tracking system used for questionnaire delivery and return dates.

Potential SIUs can be inspected or automatically supplied a lengthier questionnaire. For SIUs with potential categorical operations, the public utility will need to pay specific attention to processes performed and the products produced to determine applicable categorical pretreatment standards and determine existing/new source classifications as described in Chapter 6. A summary of the categorical pretreatment standards is provided in Appendix 5-C and a list of EPA contacts for each categorical standard is available at the following web address:

http://water.epa.gov/scitech/wastetech/guide/contact.cfm#alum .

If at any point in the process, an IU is determined not to be an SIU, the same process describe above (i.e., notification and tracking) should be performed. Collection of flow and sampling data may be necessary prior to making a final determination. Once an IU is determined to be an SIU, they should be notified of such and the permitting process commenced.

One method of ensuring all potential SIUs are identified is to compare the pollutants reported in the survey with influent samples collected from the WWF treatment plant receiving the IUs' waste. If pollutants are present in the influent which are not accounted for in the survey (and current permittees), the public utility should look further for the sources of those pollutants, such as waste haulers. Examining local telephone directories, patrolling the discharge locations, contacting the State Agency that licenses hauled waste operations, etc. can identify waste haulers. Periodic sampling of the hauled wastes discharged and requiring the haulers manifest the waste discharged to the WWF is recommended.

- Sources used to compile a comprehensive (master) list of IUs
- Methods used for the survey (questionnaire, site visits, telephone, etc.)
- Where a questionnaire was used, a copy of the questionnaire and letter sent to IUs including dates the forms were sent
- A description of follow-up actions taken by the public utility to obtain properly completed survey forms from response rate for the entire survey (including IUs that did not return the completed survey forms, despite follow-up actions)
- A master list of all IUs discharging IUs, and the to the WWF(s) that:
  - indicates IUs eliminated from the survey and justification
  - summarizes survey results including a list of IUs affected by the program, the classification for each of these IUs, and a list of pollutants known or suspected to be discharged from each IU.

Exhibit 5-1, Industrial Waste Survey Documentation for a Pretreatment Program Submission

To adequately document the industrial waste survey, the public utility should provide DEP five basic items of information (see Exhibit 5-1) for evaluation (DEP checklist provided as Appendix 5-D). Once accepted by DEP, the industrial waste survey information must be kept up-to-date to continue to provide accurate program data. The on-going task of maintaining a complete list of all users requires the Control Authority to implement a viable system to track both existing users, as they change, and new users prior to connection to the WWF. Maintaining an accurate and up-to-date industrial waste survey is a key component of a well-operated pretreatment program. The system used to achieve this may include the most successful methods used to create the initial master list or the public utility may use other techniques such as:

- Inspections
- Review of local business journals
- Newspaper advertisements
- Periodic review of plumbing, building, and occupancy licenses
- Use of “utility connect questionnaires”.

Utility connect questionnaires, or the like, are questionnaires required to be completed when applying for a new service, e.g., water, sewer, electric, etc. The questionnaire asks basic information about the operations to be performed and potentially, the wastes generated. This questionnaire can be shared with local agencies for them to contact the applicant and provide them with any relevant information for compliance with (potentially) applicable regulations.