

**CITY OF LEESBURG
PUBLIC WORKS DEPARTMENT**

**Scope of Work for
Development & Implementation
of the Pretreatment Program**

BACKGROUND

Implementation of an Industrial Waste Pretreatment Program for the City of Leesburg can result in significant reductions in the pollutants of concern that are contributed to the municipal wastewater system by nonresidential users by controlling them at the source. Furthermore, the potential for pass through and inhibition or upset of the treatment processes can be minimized with a Pretreatment Program.

Slow-rate land application has been used for effluent disposal by the City of Leesburg for many years. A significant industrial user recently has sought permission to discharge to the municipal wastewater system. These two factors in combination with an expanding service area has necessitated development and implementation of a Pretreatment Program by the City of Leesburg in accordance with Chapter 62-625, F.A.C.

This Scope of Work has been prepared at the request of City of Leesburg to develop and implement a Pretreatment Program and other related wastewater programs in compliance with requirements set forth by the Florida Department of Environmental Protection (FDEP) in Chapter 62-625, F.A.C. This Scope of Work is in support of an agreement between the City of Leesburg and the Engineer of Record, Erik L. Melear, P.E. The tasks set forth in this Scope of Work are necessary to develop the Pretreatment Program for submittal to FDEP for review and approval.

This Scope of Work shall be performed on behalf of the City of Leesburg (City) by the engineer of record, Erik L. Melear, P.E. (FL Reg. No. 0036126), herein referred to as the "Engineer".

This Scope of Work has been prepared at the request of the City of Leesburg in response to conditions set forth in the domestic wastewater facility permit, which mandate the development and implementation of an approved Pretreatment Program. The major elements set forth in this Scope of Work conform with the general requirements set forth in Chapter 62-625, F.A.C. by the Approval Authority, the Pretreatment Section of the Florida Department of Environmental Protection (FDEP).

TASKS

Pursuant to the City of Leesburg direction, the Engineer has prepared a Scope of Work for the development and implementation of a Pretreatment Program and other related wastewater programs. A description of the professional engineering services to be performed by the Engineer as part of this Scope of Work is presented in the following paragraphs. Each task description is followed by an approximate number of hours that are anticipated to complete said task.

Task A – Review Available Information and Monitoring Data

The Engineer will meet with City staff to obtain and discuss monitoring data, current facility permits, effluent discharge and reclaimed water limits, and other documents related to the City's wastewater system. The Engineer will visit the various treatment plants and other appropriate wastewater facilities. This information will be reviewed to identify the constituents of concern and the criteria governing the determination of the local limits. **Hours: 12.**

Task B – Industrial Waste Survey

An Industrial Waste Survey (IWS) will be performed by the Engineer to identify potential categorical and significant industrial users. The scope of the IWS includes the various wastewater service areas and contributing jurisdictions. Several sources of information and activities will be used by the Engineer to compile the IWS, including websites, utility records, occupational licenses, drive-by surveys and telephone directories. An information survey may be developed by the Engineer for distribution by the City to potential users. Facility inspections may be required to confirm inclusion of a user in the survey and to assess the contribution of potential constituents of concern. The City will perform the facility inspections as necessary to complete the Industrial Waste Survey. **Hours: 40.**

Task C – Sewer Use Ordinance

The existing Sewer Use Ordinance will be reviewed by the Engineer for compliance with FDEP requirements. Appropriate sections to the Sewer Use Ordinance will be prepared by the Engineer to incorporate the necessary provisions for the Pretreatment Program and other related wastewater programs in compliance with mandates from EPA and FDEP. The Sewer Use Ordinance will be reviewed and approved internally by various City Departments and Advisory Boards. The draft Sewer Use Ordinance will be forwarded to the City of Leesburg for legal review. The Engineer will respond to questions from the City Attorney and will address the comments from the legal review. As necessary, prepare revisions and discuss them with the City Attorney and other staff. Afterwards, the Ordinance will be submitted

by the City to FDEP for review and preliminary approval. **Hours: 96.**

Task D – Update Technically Based Local Pollutant Discharge Limits

The technically defensible local pollutant limits will be calculated using the FDEP Local Limit Determination System (LLIDS) computer model. A headworks analysis will be performed for each treatment plant. The tasks involved with the development of the local pollutant limits are set forth in the following paragraphs. Several tasks below are required to establish the various inputs for the LLIDS computer models.

1. The available monitoring data will be reviewed by the Engineer for completeness and to identify any deficiencies. The “background conditions” will be established by the Engineer using the monitoring data from the residential lift stations.
2. Flows for the wastewater system and the treatment plants will be reviewed by the Engineer to estimate the total industrial and annual average daily flows for each service area.
3. The Engineer will review the facility permits and agreements for each treatment plant to establish the effluent, reuse and residuals limitations.
4. The technical literature and various guidance manuals will be accessed and reviewed by the Engineer to establish “approved” inhibition values and treatment removal efficiencies.
5. Based on the available technical information and monitoring, the Engineer will recommend to the City whether additional sampling is necessary to adequately develop the LLIDS computer models for the wastewater system.
6. A LLIDS model will be developed for each wastewater service area by the Engineer to determine the technically based local pollutant limits.
7. The Engineer will develop an approach to allow variances from the uniform concentration limits. Separate LLIDS models will be designed by the Engineer if necessary to calculate variances in the local pollutant limits under special circumstances, if necessary.
8. Technically defensible uniform concentration local limits will be determined by the Engineer for the constituents of concern using the LLIDS computer models.
9. The local pollutant limits will be submitted to the City for review. The Engineer will discuss the review comments with the City and make the necessary adjustments prior to submitting the local limits to FDEP.

The Engineer will recommend uniform concentration local limits for adoption by the City following receipt of preliminary approval from FDEP. The local pollutant limits will be embodied in the Sewer Use Ordinance form the cornerstone of the legal authority for the Pretreatment Program. **Hours: 96.**

Task E – Prepare a Report on Program Updates

A report on the development of the local pollutant limits will be prepared in support of the program submittal to FDEP. The purpose of the report is to document and demonstrate the technical defensibility of the proposed local pollutant limits. The draft report will be submitted to the City for review and the comments will be incorporated into the final report. **Hours: 40.**

Task F – Capacity Loading Analysis

A Capacity Loading Analysis will be performed to demonstrate the ability of the treatment facility to handle potential slug discharges of compatible pollutants. The analysis will be done pursuant to guidelines set forth by FDEP for establishment of limits for compatible pollutants, such as CBOD and TSS, which generally are used to supplement the local pollutant limits. A draft report will be prepared and submitted to the City for review. The comments will be incorporated into the final report and submitted to FDEP in support of the proposed Pretreatment Program. **Hours: 30.**

Task G – Program Submittal Package

The package for submittal of the Pretreatment Program to FDEP generally consists of the Sewer Use Ordinance, program attorney certification statement, report on the local pollutant limits, and the capacity loading analysis for the compatible pollutants. The Engineer will prepare a draft of the Attorney's Program Certification Statement and other requisite items for submittal of the Pretreatment Program to FDEP. **Hours: 16.**

Task H – Responses to FDEP Requests for Additional Information

Review comments and Requests for Additional Information are anticipated to be received from FDEP on the various submittals. The Engineer will prepare a response to two (2) Requests for Additional Information or review comments on the various submittals to the Approval Authority (FDEP). **Hours: 8.**

Since the number of Requests for Additional Information from is not well known at this time, the City may request additional assistance from the Engineer with other

responses to correspondence from FDEP. Additional responses shall be considered beyond this Scope of Work. However, the Engineer is willing to prepare the additional responses or submittals at the request of the City in accordance with the provisions set forth in this Scope of Work for additional services.

Task I – Presentations

The number and extent of the presentations have not been defined by the City at this time. The City has requested assistance from the Engineer with the presentations, including preparation of handouts and visual aids, during the public participation process for program development.

One presentation will be prepared by the Engineer for the public workshops on program development in accordance with the regulatory requirements for public participation during the process. The Engineer will participate in one public workshop and one public hearing before the City Commission as part of the adoption process for the Sewer Use Ordinance. **Hours: 16.**

Additional presentations shall be considered beyond this Scope of Work. However, the Engineer is willing to prepare and make additional presentations at the request of the City in accordance with the provisions set forth in this Scope of Work for additional services.

Task J – Enforcement Response Plan

The primary implementation mechanism for the Pretreatment Program is the Enforcement Response Plan. Such a document is required by FDEP as part of the overall program development. The Engineer will prepare modifications to the Enforcement Response Plan and submit a draft document to the City for review. The Enforcement Response Plan will be expanded to include the Oil & Grease Management Program. The Engineer will address the City's comments and modify the Plan as necessary prior to submittal to FDEP. **Hours: 50.**

Task K – Oil & Grease Management Program

The Engineer will prepare updates and modifications to the Oil & Grease Management Program for the City in compliance with the requirements from EPA and FDEP. The Engineer will prepare the forms necessary for implementation and expansion of the program to include other areas of concerns, such as laundries. The Engineer will meet with the City to discuss the program and solicit input on the needs for the program. The Engineer will respond to the City's review comments and make the necessary revisions to the program and the forms.

The Implementation Plan for the Oil & Grease Management Program is composed of several key components, including user surveys of the wastewater service areas and the standard operating procedures (SOPs). The Engineer will conduct the surveys necessary to identify users for the Oil & Grease Management Program. A Manual of Standard Operating Procedures will be prepared by the Engineer for use by the City to implement and enforce the provisions of the Oil & Grease Management Program in an equitable and consistent manner. The Manual of Standard Operating Procedures also provide a basis for training staff to conduct the Oil & Grease Management Program. **Hours: 40.**

The City of Leesburg is required by FDEP in Chapter 62-625, F.A.C. and the forthcoming FDEP facility permit for the Canal Street WWTP to update the Pretreatment Program every five years. Part of this process is to revise and adopt a Sewer Use Ordinance with adequate legal authority to implement and enforce the provisions of the Pretreatment Program, including the new mandatory requirements. The local pollutant limits will be calculated using the results of the comprehensive monitoring program and other related plant data.

The Approval Authority (FDEP) requires the City of Leesburg to demonstrate that the proposed local pollutant limits are adequate to protect the publicly owned wastewater system and have a rational, technically defensible basis. That is, the calculations and set-up for the LLIDS model are in compliance with the guidelines that have been established by the regulatory agencies to demonstrate the integrity of the local limits.

The final report on the development of the local pollutant limits also will serve as the primary supporting document for submittal of the Pretreatment Program to FDEP. The final report will outline the protocols for development of the local limits, their technical defensibility and their adequacy to protect the City of Leesburg wastewater system.

The approval process followed by FDEP for approval of the major modifications to the Pretreatment Program continues to change and mature over time. The process may take-up to one year to conclude. Additional analyses may be necessary in order to respond to the *Requests for Additional Information* from the Pretreatment Section.

RELIANCE

The Engineer is entitled to rely upon the facility and system descriptions, flow summaries, monitoring data, laboratory reports, list of occupational licenses and other related information as provided by the City to be complete and accurate without verification or independent review. Such responsibility shall be considered beyond this Scope of Work. The City shall assume the responsibility for the information and data provided by others on behalf, or at the request, of the City.

DELIVERABLES*

Deliverables for the tasks set forth above as part of the Scope of Work for this Agreement and described herein include:

- Industrial Waste Survey,
- List of Constituents of Concern,
- Technically defensible local pollutant limits,
- Capacity loading analysis of conventional pollutants,
- Draft and final report on the determination of the local pollutant limits,
- Revised Sewer Use Ordinance,
- Program attorney's certification statement,
- Responses to two Request for Additional Information from FDEP,
- One presentation for the workshop on the Pretreatment Program,
- Submittal package for FDEP on the Pretreatment Program, including the various LLIDS models, local limit calculations and Sewer Use Ordinance,
- Enforcement Response Plan,
- Revised templates for the Industrial User Pretreatment Discharge Permit and application, and
- Standard Operating Policy and Procedures Manual for the OGMP, including the various forms, notices and certificates.

The City of Leesburg may request additional deliverables from the Engineer beyond those anticipated above for the Scope of Work set forth herein. The Engineer shall be due additional compensation for any deliverables beyond those delineated in this Scope of Work.

The deliverables for additional assignments shall be delineated by the City of Leesburg at the time of said assignment(s) and following determination of the tasks related to the additional scope of work.

SERVICES PROVIDED BY THE CITY

The City will provide certain services, information and data to the Engineer for development of the Sewer Use Ordinance, Industrial Waste Survey and the local pollutant limits as part of the Scope of Work described herein for this Agreement. These services and information include:

- Facility descriptions,
- Domestic wastewater facility application and permits,
- Map of the wastewater service areas,
- History of plant upsets and system problems,
- Pertinent correspondence from FDEP,
- Description of current wastewater programs,
- Monitoring data for the treatment plants and the wastewater system,
- Quarterly residuals analysis reports,
- Available performance data for the individual treatment processes,
- Monitoring data for individual nonresidential users,
- Laboratory services,
- Conduct additional monitoring, as necessary, for the evaluation of local pollutant limits,
- Conduct facility visits of nonresidential users, as necessary, to verify inclusion in the Industrial Waste Survey,
- Current Sewer Use Ordinance,
- Interlocal agreements as applicable, and
- Review submittals from the Engineer and correspondence from FDEP.

This list is not meant to be all inclusive or comprehensive. Additional materials may be identified as the work proceeds within the Scope of Work set forth herein. To this end, additional items or services may be requested by the Engineer to complete a task in a timely manner.

The City shall make every effort to provide the information and services described above, or requested at a later date, in a timely manner. The City shall conduct their reviews and return any comments or questions so as not to delay the efforts of the Engineer or the submittals to FDEP.

COMPENSATION

The City of Leesburg shall compensate the Engineer for the professional services that were rendered to complete the Scope of Work set forth herein as part of this Agreement.

The hourly compensation rate for this Agreement shall be \$60 per hour. The total amount for the professional engineering services as described in the Scope of Work for this Agreement is \$24,640. The City of Leesburg shall be responsible for with-holding the appropriate amount of federal income taxes. The Engineer shall complete the paperwork

Proposal for:

Pretreatment Program Update
City of Leesburg

necessary to comply with the requirements for with-holding federal income taxes.

The Engineer shall be reimbursed for mileage at a rate of \$0.45 per mile, and the direct costs for telephone calls, facsimiles, postage, computer print-outs, photocopies, and data or information acquisition from outside sources. Direct costs and mileage shall not exceed \$1,000, without prior written approval from the City.

If additional hours are necessary to accomplish the tasks described in the Scope of Work above, then written authorization will be sought for the extra hours from the City of Leesburg. Compensation for additional services shall be at the hourly rate set forth herein.

SCHEDULE

The schedule for completion of the tasks set forth herein shall be developed in consultation with the City of Leesburg. The schedule shall be an attachment to this Scope of Work and shall be agreed to jointly by the City of Leesburg and the Engineer prior to issuance of the Notice to Proceed.

The Engineer shall inform the City of possible delays. The City shall extend the schedule if the delays are the result of the City's performance or ability to provide the necessary information or data. It is further agreed the schedule shall be amended should unforeseen delays arise that are beyond the control of the City and the Engineer.

NOTICE TO PROCEED

The Engineer shall commence work upon receipt of the Notice to Proceed from the City of Leesburg. The Notice to Proceed may be verbal, but shall be followed by written confirmation.

ADDITIONAL ASSIGNMENTS

The anticipated level of effort has been set forth to complete each task comprising this Scope of Work. The process followed by FDEP for approval of the Pretreatment Program continues to change and mature over time. Thus, additional professional engineering services may be necessary for successful completion of the approval process.

Additional tasks may be assigned to the Engineer by the City of Leesburg for the Pretreatment Program and other related wastewater programs, such as the Oil & Grease Management Program and the Reclaimed Water Program, preparation of annual reports for submittal to EPA and FDEP, such as the residuals annual summary and pretreatment program annual report. Additional tasks, schedule, deliverables and compensation shall be described in a written amendment to this Scope of Work. The amendment to this

Scope of Work shall be approved by both City and the Engineer prior to commencement of said work. Approval of the amendment to this Scope of Work by both parties shall constitute the Notice to Proceed for these additional services. Compensation for these additional services shall be at the hourly rate set forth herein.

ENGINEER OF RECORD

The Engineer of Record for this Scope of Work and the related Professional Services Agreement shall be:

ERIK L. MELEAR, P.E.

Florida Registration No. 0036126

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AUTHORIZATION & SIGNATURES

ENGINEER:

Erik L. Melear, P.E.
Florida Registration No. 0036126

Date

CITY OF LEESBURG:

Authorized Representative

Date

Title