
PERFORMANCE AUDIT OF THE PUBLIC UTILITIES DEPARTMENT'S INDUSTRIAL WASTEWATER CONTROL PROGRAM – PART II

IWCP's Current Methods of Identifying Industrial Users Have Likely Left Many Businesses Unpermitted, and, While IWCP Generally Keeps Up with Inspections and Permits for Certain Businesses, IWCP Should Reassess Its Capacity for Handling Future Workloads

Office of the
City Auditor

City of San Diego



Performance Audit of the Public Utilities Department's Industrial Wastewater Control Program – Part II

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Why OCA Did This Study

The Industrial Wastewater Control Program (IWCP) is a key component of the City's environmental management efforts and plays a critical role in complying with wastewater regulations. We conducted this audit to determine (1) whether IWCP maintains a complete and accurate inventory of industrial users within the Metropolitan Wastewater Area; and (2) whether and to what extent IWCP has inspected and issued a permit to regulated industrial users.

What OCA Found

Finding 1: Because IWCP is responsible for regulating certain industrial businesses, being aware of all those businesses is foundational to the program's success. While the program uses several methods to achieve this, we found some of them to be outdated and inefficient. In addition, IWCP management reported not having enough staff to keep up with identifying all potential industrial users. As a result, we found IWCP is unaware of hundreds of businesses that may potentially need to be regulated. This may diminish IWCP's effectiveness and creates an unfair advantage for unregulated businesses.

Finding 2: Our review also included timeliness aspects of IWCP's inspection and permitting activities, which are core functions of the program. We found IWCP is generally meeting established requirements for conducting inspections and issuing permits to industrial users that fall under federal regulations. We commend IWCP for this but also recommend monitoring and reporting to help ensure full compliance. In addition, we found IWCP inspects and permits other industrial users—those in the Enhanced Source Control Program (ESCP)—much less frequently, mainly because they fall under local regulations and have historically not been prioritized by the program. PUD management stated that this is changing due to the importance of ESCP for the Pure Water Program; however, IWCP has not established target inspection frequencies or determined what staffing resources will be needed to meet increased workloads.



IWCP staff inspecting a water reclamation tank. Source: OCA.

What OCA Recommends

We make 7 recommendations to help IWCP better understand its service demands, improve oversight of critical program outputs, and plan its future capacities. Key recommendations include:

- Updating the program's policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area;
- Working with the Economic Development Department to update the City's [OpenCounter](#) portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations;
- Developing procedures for monitoring the effectiveness of methods for identifying new businesses, conducting inspections, and issuing permits;
- Establishing target service levels for inspections and permit issuances for both federally- and locally-regulated industrial permittees; and
- Completing a staffing analysis to determine resources necessary to meet target service levels.

These changes can help the program improve effectiveness in protecting the City's environmental quality and wastewater infrastructure.

For more information, contact Andy Hanau, City Auditor at (619) 533-3165 or cityauditor@sandiego.gov.



THE CITY OF SAN DIEGO

March 11, 2021

Honorable Mayor, City Council, and Audit Committee Members
City of San Diego, California

Transmitted herewith is Part II of a performance audit report on the Public Utilities Department's Industrial Wastewater Control Program. This report was conducted in accordance with the City Auditor's Fiscal Year 2021 Audit Work Plan, and the report is presented in accordance with City Charter Section 39.2. The Results in Brief are presented on page 1. Audit Objectives, Scope, and Methodology are presented in Appendix B. Management's responses to our audit recommendations are presented after page 47 of this report.

We would like to thank staff from the Public Utilities Department. All of their valuable time and efforts spent on providing us information is greatly appreciated. The audit staff members responsible for this audit report are Shadi Matar, Luis Briseño, Danielle Knighten, and Kyle Elser.

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Results in Brief

The Industrial Wastewater Control Program (IWCP) regulates certain types of industrial businesses within the Metropolitan Wastewater Area to minimize toxic discharges to the sewerage system and comply with federal, state, and local wastewater and environmental regulations. IWCP is essential for securing a secondary treatment waiver from the federal government, which helps the City avoid approximately \$2 billion in upgrade costs to the Point Loma Wastewater Treatment Plant. IWCP also plays an increasingly significant role as the Pure Water Program is implemented, which will convert recycled water into drinking water.

Finding 1: IWCP Needs to Enhance and Modernize its Methods for Identifying Industrial Users in the Metropolitan Wastewater Area to Ensure it Regulates All Applicable Businesses and to Protect Environmental Quality and Wastewater Infrastructure

In order to effectively regulate all industrial users that are under the program’s purview, IWCP must first identify all businesses that potentially require permits from the program. However, we found that IWCP’s methods for identifying industrial businesses are outdated and inefficient. For example, IWCP does not utilize business locations data published by San Diego County to locate businesses that should be reviewed by the program.

As a result, IWCP is not identifying all the industrial users in the Metropolitan Wastewater Area. This has left IWCP unaware of potentially hundreds of users that may need permits from the program. Leaving many businesses unpermitted increases the risk of toxic discharges and creates an unfair playing field where some businesses incur permitting and compliance costs while other, similar businesses do not. We recommend that the program enhance and modernize its methods for identifying industrial users in the Metropolitan Wastewater Area to ensure all applicable businesses are regulated and to protect environmental quality and wastewater infrastructure.

Finding 2: IWCP Generally Completes Inspections and Issues Permits On-time for Significant Industrial Users, but Efficiency Improvements

Once industrial businesses are identified, IWCP’s regulatory responsibilities under federal and local requirements include inspecting industrial users’ facilities and issuing industrial wastewater permits. Currently, IWCP’s permit inventory includes 86 federally-regulated Significant Industrial Users (SIUs), as well

and Potentially Additional Staff May be Necessary to Handle Likely Increases to its Future Workload

as 668 non-SIUs that are regulated locally via the Enhanced Source Control Program (ESCP).

We found that IWCP is generally keeping up with inspections and permits for SIU facilities, which are regulated under federal requirements. However, IWCP did not achieve 100 percent compliance with these requirements. In addition, IWCP inspects and issues permits to non-SIUs that fall under local requirements—those in ESCP—much less frequently than those regulated under federal requirements. In fact, about 6 years elapsed between inspections of these facilities, on average. While local requirements do not specify how frequently facilities of industrial users in ESCP must be inspected, according to PUD management, IWCP has recently been making efforts to inspect and renew permits for these facilities. According to PUD management, these efforts will ensure program compliance ahead of changes that will result from the implementation of the Pure Water Program. In addition, according to IWCP management, the program intends to evaluate industrial users in ESCP much more frequently in the future but has not yet established target inspection frequencies.

IWCP management attributes relatively infrequent inspections and permit renewals for industrial users in ESCP to historically prioritizing compliance with federal requirements (by focusing on SIUs and other industrial users subject to federal categorical pretreatment standards). In addition, IWCP does not directly report on inspection frequency or whether it issues permits on-time in its annual pretreatment reports. Moreover, IWCP management pointed out some staffing issues, including turnover and vacancies last year and the need to better train staff to minimize permit processing times.

We agree that the above issues need to be addressed. Additionally, we found that the program's underlying staffing capacity may not be enough to complete all program tasks. This is especially concerning given that the inventory of industrial users—and the program's associated regulatory work—will likely grow by potentially hundreds of businesses in the future if IWCP implements the audit recommendations made in Finding 1. We recommend that IWCP begin tracking and monitoring inspection frequencies and on-time permit issuance, conduct a staffing

analysis to determine the resources needed to achieve desired inspection frequencies, and request the required resources during the annual budget process.

We make seven recommendations to help the program better understand its service demands, improve oversight of critical program outputs, and plan its future capacities. Our full recommendations can be found on page 38. PUD agreed to implement all seven of these recommendations.

Background

The Industrial Wastewater Control Program (IWCP) represents a key element of the Public Utilities Department's (PUD) environmental management efforts. IWCP is a pretreatment and pollution prevention program that was implemented by the City of San Diego (City) in 1982 and is intended to minimize toxic discharges to the metropolitan sewerage system. The program focuses on four main functions:

1. Operating an industrial wastewater discharge permit system to establish industrial discharge limits and requirements;
2. Conducting periodic facility inspections and unannounced sampling;
3. Conducting enforcement procedures to deter violations and bring noncompliant dischargers back into compliance with discharge standards and requirements; and
4. Issuing industrial user guidance and permit conditions designed to encourage pollution prevention and waste minimization.

IWCP operates an industrial wastewater discharge permit, monitoring, inspection, and enforcement system for the City and 12 other jurisdictions, referred to as Participating Agencies (PAs), within the County of San Diego.¹ Currently, around 68 percent of industrial users² are located within the City of San Diego while the remaining 32 percent are located within the PAs. According to PUD management, IWCP has historically met its program

¹ This arrangement is governed by contractual service agreements and Interjurisdictional Pretreatment Agreements signed by the City of San Diego and each of the 12 Participating Agencies. These agreements establish IWCP's authority to implement and enforce pretreatment regulations in contributing agencies and require that they adopt equivalent ordinances, penalties, and procedures for regulation of industrial users in their service areas.

² Throughout this report, we use the term "industrial users" to refer specifically to industrial businesses that are subject to regulation by the program, while the general term "industrial businesses" refers generically to all industrial entities in the Metropolitan Wastewater Area, regardless of whether they are subject to regulation by the program.

objectives, which has resulted in minimal wastewater treatment plant upsets and few permit compliance issues.

IWCP Operates Under a Complex Legal Framework, Including Regulations at the Federal, State, and Local Levels

IWCP applies and enforces federal pretreatment regulations set forth by the U.S. Environmental Protection Agency (EPA) pursuant to the Code of Federal Regulations, the Clean Water Act, and local program requirements mandated in the City of San Diego’s Municipal Code. Under state and federal regulations, the City must implement the federal Industrial Pretreatment Program to control the discharges of all Significant Industrial Users (SIUs). In addition, the California Regional Water Quality Control Board for the San Diego Region and the EPA jointly issue a permit to the City under the National Pollutant Discharge Elimination System (NPDES). The NPDES permit requires the City to implement a non-industrial Source Control Program to regulate the discharge of toxic pollutants and pesticides into the system from non-industrial sources. The EPA requires that pretreatment programs like IWCP be evaluated annually for compliance with federal pretreatment program requirements. Additionally, the City’s Independent Rates Oversight Committee (IROC) advises the Mayor and City Council on policy issues relating to the oversight of PUD operations, which includes IWCP. Moreover, the City Council’s Environment Committee’s oversight responsibilities include (but are not limited to) programmatic policy matters related to wastewater and IROC. Finally, IWCP also operates under interjurisdictional pretreatment agreements between the City and each of the 12 Participating Agencies, which establish IWCP’s authority to implement and enforce pretreatment regulations within the Metropolitan Wastewater Area.³

Regulations for Significant Industrial Users are Set by the Federal Government While Those for Non-Significant

The program administers various types of permits both inside the City of San Diego and 12 other Participating Agencies across the Metropolitan Wastewater Area. The majority of permits that require routine inspection and permitting are for Significant Industrial Users (SIUs) and non-Significant Industrial Users (non-SIUs).

³ The Metropolitan Wastewater Area refers to the geographic area encompassed by the City of San Diego and the 12 Participating Agencies within the County of San Diego, as shown in [Exhibit 3](#) of the Follow-up Performance Audit of IWCP.

Industrial Users are Set by the Program

SIUs are all industrial users that are subject to categorical pretreatment standards set forth in Title 40 of the Code of Federal Regulations, Chapter I, Subchapter N, Parts 405 – 471. The term “SIU” includes industrial users that: discharge an average of 25,000 gallons per day of process wastewater (excluding sanitary and “dilute wastewater,” as defined at 40 CFR 403.6 e(1)(i) under “FD”); contributes a process waste stream that makes up 5 percent or more of average dry weather hydraulic or organic capacity of the publicly-owned treatment works; or is determined to have reasonable potential for adversely affecting the publicly-owned treatment works' operation or for violating any pretreatment standard or requirement.

Non-SIUs are not subject to federal pretreatment standards but still need to be regulated by the program. Non-SIU standards and regulations are set by the program, and many of their requirements, such as inspections, are currently conducted on an as needed basis. Non-SIUs are regulated as part of the Enhanced Source Control Program (ECSP), a component of IWCP.

IWCP’s Industrial User Inventory Includes Almost 750 Active Permits

IWCP regulates various types of industries, primarily by issuing a variety of permits to businesses based on industry type and amount of wastewater discharge.

The program’s Pretreatment Annual Report for the Point Loma Wastewater Treatment Plant stated that, as of as of December 31, 2019, IWCP had an inventory of almost 750 active permits. This inventory is comprised of industrial users of different classes. These classes each have different regulatory requirements that either fall under the Code of Federal Regulations, the parameters of the NPDES permit, or local statutes set in the City of San Diego’s Municipal Code. **Appendix C** provides a summary of the inspection and permit requirements for each industrial user class.

IWCP utilizes the Pretreatment Information Management System (PIMS) to track information related to the inventory of permitted facilities. Specifically, IWCP uses PIMS to track industrial user permit information; inspection, monitoring, and violation data; and to charge most program fees.

IWCP’s Staffing and Budget IWCP’s staff primarily consists of two Program Managers, Supervising Inspectors, Inspectors, and support staff. The second Program Manager position was recently added to assist in the implementation of the Pure Water Program requirements. The Inspectors and their Supervisors are tasked with inspections, permitting, investigation, and enforcement duties related to the industrial user inventory. The support services group, which is comprised of Inspectors, an Administrative Aide, and other administrative staff have also been tasked with assisting in Pure Water Program requirements and have also worked on updating the industrial user inventory. IWCP’s budgeted staffing and expenses for recent years are summarized in **Exhibit 1**.

Exhibit 1

Industrial Wastewater Control Program Budgeted Staffing and Expenses, 2017 – 2020

	2017	2018	2019	2020
Positions	29	26	32	32
Expenses	\$3,814,965	\$3,356,631	\$3,971,596	\$3,971,596

Notes: Figures in the table reflect total budgeted staffing and expenses for all sections of the program (permits, enforcement, supportive services, and sampling). According to PUD, this does not include costs from the Environmental Chemistry Services section (ECS), which analyzes user samples for IWCP, because this is not a core ECS function. According to PUD, IWCP samples make up only about 6 percent of ECS’s total expenses.

Figures for 2017 through 2019 reflect information from PUD’s Annual Wastewater Pretreatment Program Reports, which is reported on a calendar year basis. Figures for 2020 reflect budget information from the City’s enterprise resource planning system, which is recorded on a fiscal year basis.

Source: Auditor generated based on information from PUD and the City’s enterprise resource planning system, SAP.

IWCP Underwent Changes as a Result of a Program Assessment In June 2018, IWCP hired a consultant team to review and assess staffing levels, organization, and workflow. The resulting report made a total of 22 recommendations across 6 program areas. Among these recommended changes is an organizational restructuring to facilitate the Enhanced Source Control Program’s (ESCP) workflow.⁴ Previously, inspections and

⁴ ESCP was created in 2003 in response to regulatory requirements associated with the waiver from secondary treatment granted to the City’s Point Loma Wastewater Treatment Plant. As the City

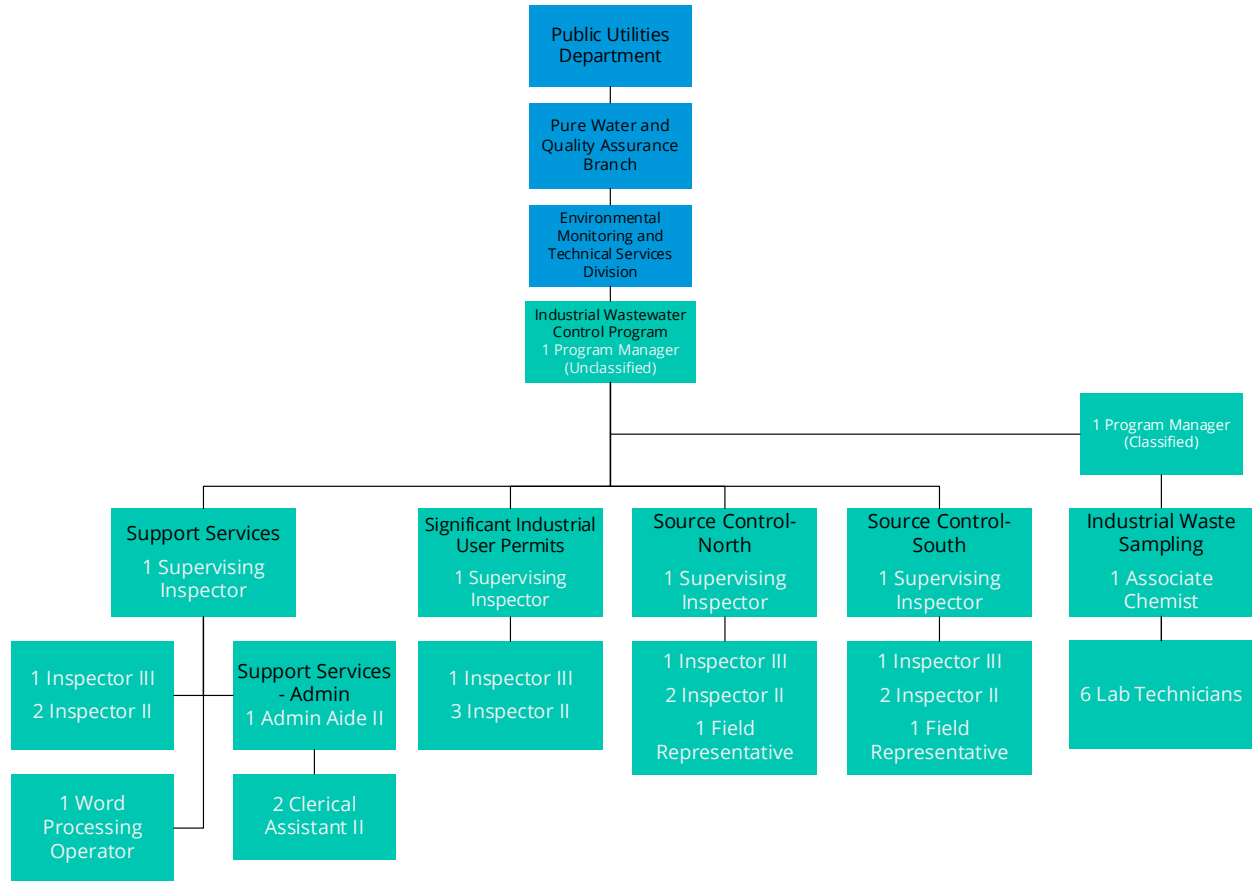
permitting for both SIUs and businesses that fell within ESCP were handled by the same work group. A Field Representative position was also added to each arm of ESCP. Field Representatives assist Inspectors by identifying potential industrial users in the field, contacting business representatives, and providing them with program information, and supporting in special projects. As shown in **Exhibit 2**, SIU inspection activities have been assigned to one group of inspectors while non-SIU businesses have been assigned to two groups—Source Control-North and Source Control-South.

In addition, in February 2019, PUD requested a Special Salary Adjustment (SSA) of 20 percent for the Industrial Wastewater Pretreatment Inspector series (Inspector I, II, and III). The SSA was intended to address retention issues in the program, the differential in salary created by prior SSAs for Chemists and Lab Technicians, and to increase the incentive for staff to remain with the City and IWCP. According to PUD, the SSA was approved, and new salaries were effective July 2019.

begins implementing the first phase of the Pure Water Program, ESCP will be important to regulate the discharge of toxic pollutants and pesticides into the system from non-industrial sources.

Exhibit 2

IWCP Created Two Groups for the Enhanced Source Control Program and Added Positions to Assist in Pure Water Implementation



Source: Auditor generated based on information provided by PUD.

Our Previous Audits of IWCP Focused on Cost Recovery Issues

In August 2013, our office completed a performance audit of IWCP, which found that outdated program fees, billing lapses, and inadequate controls limited program cost recovery. We estimated that only 15 percent of billable costs were recovered by IWCP permittees; the other 85 percent were offset by charges to other ratepayers, including residential and commercial customers. In addition, we issued a confidential memorandum raising the possibility that IWCP’s cost recovery practices were not in compliance with Proposition 218 (Prop 218). Our office made a total of 13 recommendations in 2013 to correct these issues, but the City had fully implemented only 3 of the recommendations by January 2020.

Our office therefore completed a follow-up audit July 2020, which found that the issues we identified in 2013 remained

largely unaddressed. For example, cost recovery remained very low at 14 percent. In addition, our follow-up audit reported that City customers alone are subsidizing the program's unrecovered costs, even though the program also serves customers in the 12 Participating Agencies. We made nine recommendations to address these issues, and PUD agreed to implement all of them. As of February 2021, PUD reported progress on implementing many of these recommendations.

These reports are available on the Office of the City Auditor's website at the following locations:

- Performance Audit of the Industrial Wastewater Control Program (2013):
https://www.sandiego.gov/sites/default/files/14-002_IWCP.pdf
- Follow-up Performance Audit of the Industrial Wastewater Control Program (2020):
https://www.sandiego.gov/sites/default/files/21-001_iwcp_follow-up.pdf

Audit Results

Finding 1: IWCP Needs to Enhance and Modernize its Methods for Identifying Industrial Users in the Metropolitan Wastewater Area to Ensure it Regulates All Applicable Businesses and to Protect Environmental Quality and Wastewater Infrastructure

Finding Summary

In order to effectively regulate all industrial users that are under the program’s purview, the Industrial Wastewater Control Program (IWCP) must first identify all businesses that potentially require permits. However, we found that IWCP is not identifying all potential industrial users in the Metropolitan Wastewater Area. This has left IWCP unaware of potentially hundreds of users that may need IWCP permits. Leaving many businesses unpermitted increases the risk of toxic discharges and creates an unfair playing field where some businesses incur permitting and compliance costs while other, similar businesses do not. The program needs to enhance and modernize its methods for identifying industrial users in the Metropolitan Wastewater Area to ensure all applicable businesses are regulated and to protect environmental quality and wastewater infrastructure.

IWCP is Required to Identify All Possible Industrial Users

IWCP is subject to guidelines set by the U.S. Environmental Protection Agency (EPA) and the National Pollutant Discharge Elimination System (NPDES) permit depending on the industrial user classification. According to the Code of Federal Regulations and EPA best practices, IWCP has a responsibility to identify and locate all possible industrial users within its wastewater system that might be subject to the program. In addition, the City provides an updated list of all Significant Industrial Users (SIUs) in its annual pretreatment report, in accordance with requirements of the NPDES permit.

IWCP Uses Several Methods to Identify Industrial Users

According to IWCP, the program uses the following methods to identify industrial users that may need a permit from the program:

1. Reviewing industrial user application requests.
2. Screening referrals from the following sources:
 - a. The County of San Diego's Department of Environmental Health and Quality – Hazardous Materials Division;
 - b. The City of San Diego's Development Services Department;
 - c. Public Works Departments of Participating Agencies; and
 - d. Permit Assistance Centers throughout the Metropolitan Wastewater Area.
3. Tracking business openings, closings, and relocations during Inspectors' normal course of work when in the field in their assigned geographical areas.
4. Screening the business license list on a periodic basis and sending screening surveys to potential industrial users.
5. Annually reviewing area telephone directories by business category. The new listings are compared with the previous directory and current industrial user inventory to check for new, relocated, and closed businesses.
6. Routinely asking industry contacts about their competitors in the area.
7. Requesting an Annual Water Consumption Report from all water purveyors servicing areas tributary to the metropolitan sewerage system. The report lists all non-domestic facilities consuming greater than 25,000 gallons of water per day; the report is screened to identify industrial users that may be classified as SIUs due to flow.

According to guidelines provided to inspectors, the inventory of industrial users should also be updated to include businesses that may not need a permit but that should be recorded in the Pretreatment Information Management System (PIMS) nonetheless, so that IWCP has a record that the business was reviewed.

IWCP management told us these methods are part of their normal workflows. However, our results suggest these methods are not fully effective or may not be fully employed by the program. Historically, the program has not tracked which methods have been more effective in identifying new industrial users and has instead relied on anecdotal information from Inspectors. Tracking results for each method could help the program understand which are more effective; thus the program should strategize its approach and prioritize the more successful methods in the future.⁵ Moreover, to improve oversight and ensure the program continues using these methods in the future, the program could compile and report this information externally and on a regular basis. There are at least two possible venues for this, including reporting this information to the City Council's Environment Committee⁶ or the Independent Rates Oversight Committee.⁷

⁵ This refers to tracking how many potential industrial users were identified as possibly needing a permit, how many were assessed by the program, and ultimately how many were determined to need a permit.

⁶ The Environment Committee's areas of responsibility include programmatic policy matters related to water, wastewater, and storm water, and parks. These encompass the Clean Water Program; water management and policy; Pure Water Program, including Capital Improvement Projects (CIP); energy (solar, property assessed clean energy programs, green); multiple species conservation program; solid waste disposal; recycling; air quality standards; hazardous waste; regional parks; open space; public utilities; golf; utility undergrounding; franchise agreements; storm water management and policy, Climate Mitigation and Adaption Plan (CMAP), wastewater management and policy; Independent Rates Oversight Committee; indirect potable reuse/direct potable reuse; recycled water; graywater; San Diego County Water Authority; wildlife management; environmental services; and environmental policy.

⁷ In addition to serving as an official advisory body to the Mayor and City Council on water and wastewater services, IROC also oversees and advises on planning and operations including, but not limited to resource management, cost effectiveness, planned expenditures, service delivery methods, public awareness and outreach efforts, and the City's efforts to provide high quality and affordable services.

We Used County Data to Identify Many Additional Businesses That IWCP May Need to Assess

IWCP's current methods of identifying industrial users are not fully effective in capturing all the businesses that should be regulated by the program. We compared select categories from the County of San Diego's business sites data⁸ to the permit records in IWCP's Pretreatment Information Management System (PIMS) and could not locate about 58 percent of businesses from the County data in PIMS—meaning that IWCP had identified only about 42 percent of businesses within select categories that could potentially need a permit.

These results suggest that IWCP is not aware of many of the businesses that it should potentially be permitting. We selected business categories in the County data by first matching the names of businesses from the County dataset to the names of businesses in PIMS. We then selected business categories with the highest matching percentages to explore further, since these would be the most likely to contain other businesses that we would expect could or should be regulated by the program. For example, we included the Bio-tech Industry category because, according to IWCP's Inspector Manual, biotechnology research firms are a targeted business for the program. We anticipated that targeted businesses would likely require at least an assessment by the program to determine whether the business should be permitted. However, IWCP would need to be aware of the business in the first place to conduct such an assessment. The results in **Exhibit 3** suggest this is not the case for potentially hundreds of businesses.

⁸ This data is available on the [SanGIS Regional Data Warehouse](#) and includes the locations of business sites within San Diego County.

Exhibit 3

County Data Includes Hundreds of Potential Industrial Users that IWCP is Not Aware Of

Business Category	Total # Businesses Checked	# Not Located in PIMS	% Not Located in PIMS	% Located in PIMS
RENTAL LINENS	8	5	62%	38%
BIO-TECH INDUSTRY	148	75	51%	49%
BOAT MFG	13	11	85%	15%
CHEMICALS	8	3	38%	62%
BIO-MED R&D	51	24	47%	53%
HOSPITAL	90	67	74%	26%
METAL-HEAVY MFG	50	28	56%	44%
MFG HEAVY	36	25	69%	31%
AUTO WASHER / AUTO WASH-SELF SERV	92	37	40%	60%
ELECTRICITY GEN	39	22	56%	44%
ELECTRONIC ASSEMBLY	28	16	57%	43%
AEROSPACE (AIRFRAME)	45	32	71%	29%
CIRCUIT BOARD MANUFACTURING	5	3	60%	40%
WINERY	91	47	52%	48%
FOODS	54	44	81%	19%
	758	439	58%	42%

Source: Auditor generated based on data from the County of San Diego and information from IWCP's Pretreatment Information Management System.

**Our Results are Limited
by Data Issues and Our
Outside Perspective**

We acknowledge that these results are limited because the business categories in the County dataset may be too broad, and businesses self-report this information to the County. This means there may be some businesses in each category that are not actually the exact type of business described by the category name.⁹ In addition, we were not able to determine, based on our limited review, whether businesses in these categories actually require a permit; IWCP would need to make this determination after assessing business operations. Finally, we cannot infer whether or to what extent the businesses not yet identified by IWCP (those not located in PIMS) include any SIUs. Again, IWCP

⁹ For example the Foods category may include grocery stores, cafes, offices for food corporations, or similar establishments that would typically not require a permit from IWCP and that should be categorized differently. Since the County data includes separate categories for cafes and grocery stores, those categories are more appropriate for those businesses than the Foods category.

would need to make that determination based on their assessment of business processes.

IWCP is Better Suited to Identify Potential Industrial Users Using the County Data

Nevertheless, in seeking to assess whether IWCP maintains a complete and current inventory of industrial users, we took this approach because it is not part of the program's current methods for doing so. As experts, IWCP staff are better suited to identify industrial users of interest more efficiently by targeting specific business categories within the County data. For example, businesses within the Bio-tech Industry category may be more likely to require a permit from IWCP than businesses in the Foods category. Therefore, IWCP need not review all records in the dataset and could instead take a more targeted approach.

IWCP's Review of Our Results Shows Many of the Businesses We Identified Likely Need an Assessment and Potentially a Permit

While our analysis has limitations, our results indicate that there are potentially many industrial businesses within the County data that IWCP is not aware of and that it may need to assess, inspect, and/or issue a permit to. In fact, IWCP management confirmed that some of the businesses we identified would probably require permitting after an inspection. Specifically, we judgmentally selected 50 businesses that we could not locate in PIMS and asked IWCP management whether they are of interest to the program, meaning that business operations would likely need to be assessed and could potentially require a permit. From this list of 50 businesses, IWCP management reported that they would need to assess 26 (52 percent) to determine whether the business needs a permit. While this was only a review of a small, non-random sample, it indicates that, out of the 439 non-permitted businesses we identified, potentially hundreds of them require an assessment, which may result in permitting.

IWCP Can Improve Efforts for Identifying Potential Industrial Users Outside the City

In addition, our results suggest IWCP has not identified industrial users outside the City of San Diego as effectively as it has within the City of San Diego, even though IWCP is also responsible for regulating industrial users in those jurisdictions (the Participating Agencies). Of the total number of businesses from the County data we checked against PIMS, IWCP did not identify approximately 55 percent of the businesses located within the City of San Diego. However, that figure was higher, at 66 percent, for businesses located outside the City. This suggests IWCP can improve its efforts for identifying potential industrial users

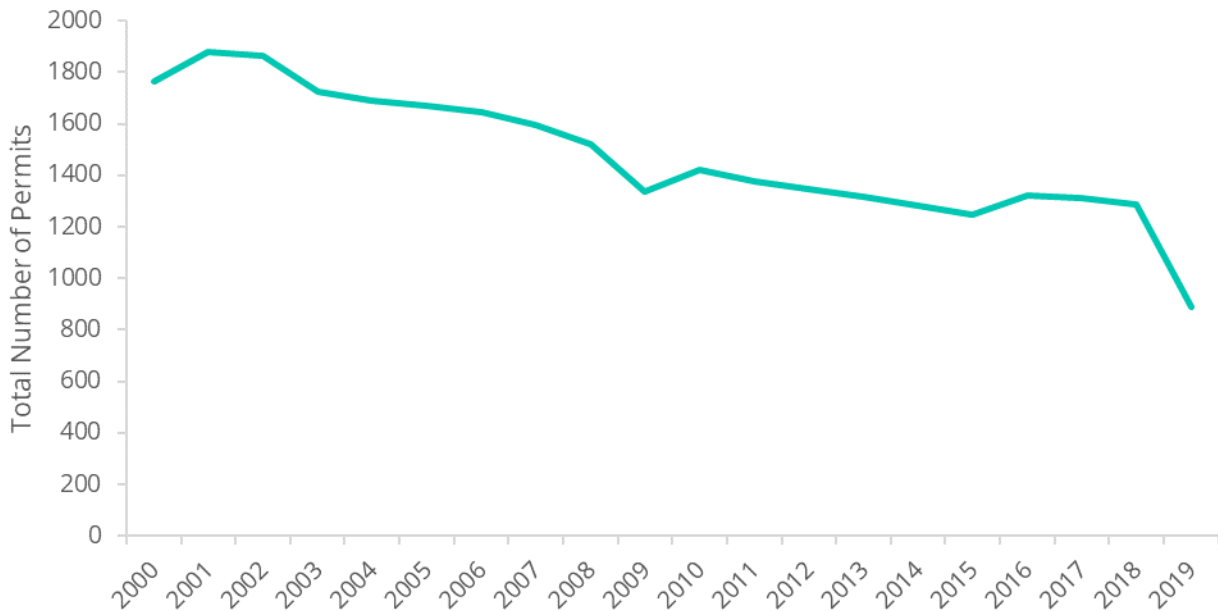
outside the City to ensure a complete and current inventory of industrial users across the Metropolitan Wastewater Area.

Industrial User Inventory Has Declined Over Time, Which May Indicate IWCP is Not Identifying All Industrial Users

According to IWCP, total industrial user inventory has been on the decline since 2002 due to business closures, relocations, and technological advances in water reclamation. Although total inventory has decreased, SIU inventory has steadily grown since 2007. This is due to changes in criteria for regulating certain industrial users that now get included in the SIU count.¹⁰ **Exhibit 4** shows the change in the total number of permits between 2000 and 2019. As explained further below, we found that the decline may also be due to IWCP’s use of outdated and ineffective methods to identify all users that should be permitted.

Exhibit 4

IWCP's Inventory Has Declined by Almost 1,000 Active Permits Since 2001



Source: Auditor generated based on information from PUD’s 2019 Pretreatment Annual Report for the Point Loma Wastewater Treatment Plant.

The Methods IWCP Uses to Identify Potential Industrial Users Are

This decline may also be due to shortcomings in identifying all industrial users, which may stem from the use of outdated and inefficient methods. For example, some of the methods used by

¹⁰ These facilities are temporary groundwater remediation facilities and construction dewatering permits. They are short term permits but do get counted in the overall SIU total.

Outdated, Inefficient, and Ineffective

the program, such as comparing yearly phone book releases, are outdated and are not effective in capturing all industrial users in the Metropolitan Wastewater Area. In addition, IWCP receives manual referrals from the Development Services Department whenever specific project types trigger Mechanical Reviewers to ask customers to provide an approval letter from IWCP. While this referral process represents a valuable internal control, there are opportunities to automate similar referrals from businesses seeking to establish or expand their operations. For example, the City launched its OpenCounter portal in 2016 as a virtual tool to help business applicants identify the permits they must obtain from the City to operate their business. However, OpenCounter does not currently include IWCP permits in the list of permits applicants may need to obtain. Therefore, there may be an opportunity to leverage OpenCounter as a more modern and automated way of identifying additional industrial users by adding IWCP permits to that platform. **Exhibit 5** shows excerpts from the City’s OpenCounter portal.

Exhibit 5

OpenCounter Does Not Include IWCP as a Permit Option in Its Portal

The screenshot displays the 'Business Portal' interface for the City of San Diego. It is divided into four steps: STEP 1/4 (Business Type), STEP 2/4 (Location), STEP 3 (PERMITS), and STEP 4/4 (PERMIT FEES). The 'PERMITS' list includes:

- Building Permit
- Business Tax Certificate
- Coastal Development Permit
- Development Impact Fees
- Electrical Permit
- Facilities Benefit Assessments
- Fictitious Business Name Permit
- Fire Permit - Alarm
- Housing Impact Fee
- Mechanical Permit
- Plumbing Permit
- Right-of-Way - Construction Plan Permit
- Right-of-Way - Traffic Control Permit
- Right-of-Way Permit
- Sign Permit
- Site Development Permit

The 'PERMIT FEES' table shows the following costs:

Permit	Cost
Building Permit	\$11,568.77
Business Tax Certificate	\$38.00
Development Impact Fees	...
Electrical Permit	...
Fictitious Business Name Permit	\$42.00
Fire Permit - Alarm	\$423.25
Housing Impact Fee	...
Plumbing Permit	\$151.78
Site Development Permit	\$13,000.00
Total Cost	\$25,223.80

Source: Auditor generated based on various pages within the City of San Diego’s OpenCounter Portal <https://business.sandiego.gov/>.

Other methods rely on current industrial users to report their competitors or on Inspectors to identify new industrial users while out in the field. However, as discussed in Finding 2, IWCP has a backlog of pending permits that makes completing inspections a priority over identifying new industrial users. If inspectors do identify new businesses, they are likely adjacent or nearby to a business with an existing permit or application. This may create clusters of permitted industrial users in certain areas while potential industrial users in other areas may not be identified by the program's traditional methods. In addition, according to IWCP management, updating the program's industrial user inventory is normally done by Field Representatives and primarily through in-person contacts based on observations while in the field. However, Field Representatives have recently been working on catching up on the backlog of permit renewals for industrial users in ESCP rather than assisting in larger efforts to identify new industrial users.

According to IWCP Management, the Program Does Not Have Enough Staff to Keep Up with Identifying All Potential Industrial Users

In addition, IWCP has cited staffing vacancies as a potential reason why they have not been able to identify all businesses that may need an IWCP permit. For example, IWCP is facing a backlog of inspections and permits, especially with the non-SIU facilities that affect the Pure Water project. As a result, field representatives are focused on bringing the backlog up-to-date instead of maintaining the inventory of industrial users. Therefore, while IWCP may have methods available to keep the inventory current, the methods may not always be employed because of shifting operational demands and existing resource constraints. This underscores the importance of using the most efficient methods for identifying potential industrial users, including the use of data-driven and automated solutions to leverage existing resources.

Not Being Aware of All Industrial Users May Diminish IWCP's Effectiveness and Creates an Unfair Advantage for Unregulated Businesses

Our results indicate that IWCP's procedures are not fully effective in identifying and locating all possible industrial users that might be subject to its regulatory program. As a result, there is a risk that IWCP is not regulating all industrial users that are subject to the program and its regulatory requirements. This diminishes the City's level of assurance that IWCP is minimizing

toxic discharges to the metropolitan sewerage system, which could negatively affect wastewater infrastructure and the environment. In addition, there is a risk that IWCP is not applying regulatory requirements uniformly across all businesses, which is unfair and creates an advantage for unpermitted businesses that should be regulated as industrial users by the program.

IWCP Can Make Several Changes to Improve Awareness of Businesses That May Need to be Regulated

According to PUD management, unpermitted industrial users have not yet led to significant consequences, such as environmental impacts or treatment plant damage.

Nevertheless, it is important to improve IWCP's awareness to prevent these incidents from happening in the future and to increase fairness for businesses. We found several ways the City can improve its methods for identifying potential industrial users; therefore, we recommend:

Recommendation 1

To help maintain a complete and current inventory of industrial users, the Industrial Wastewater Control Program should update its existing policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. Specifically, the updated policies, procedures, and methods should:

- a. Include directions for analyzing business sites data from the County of San Diego to identify businesses that may potentially be regulated by the program as industrial users;
- b. Include enhanced methods for identifying businesses outside the City of San Diego, such as increased collaboration with the permitting agencies of other local jurisdictions within the Metropolitan Wastewater Area;
- c. Specify which staff members are responsible for conducting this new analysis and specify which staff members are responsible for employing each of the existing methods; and
- d. Specify how often responsible staff should conduct this new analysis and specify how often responsible staff should employ each of the existing methods.
(Priority 1)

- Recommendation 2** The Industrial Wastewater Control Program should train all staff responsible for regularly updating the inventory of industrial users, as noted in Recommendation 1, on procedures to identify potential industrial users in the Metropolitan Wastewater Area. (Priority 2)
- Recommendation 3** The Industrial Wastewater Control Program (IWCP) should work with the Economic Development Department to update the City's OpenCounter portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations. (Priority 3)
- Recommendation 4** The Industrial Wastewater Control Program (IWCP) should develop procedures to track the results of using the updated methods described in Recommendation 1, including how many potential industrial users were identified, how many were assessed, and how many were determined to need a permit from the program. IWCP should report this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee annually, along with the information produced by implementing Recommendation 6. (Priority 2)

Finding 2: IWCP Generally Completes Inspections and Issues Permits On-time for Significant Industrial Users, but Efficiency Improvements and Additional Staff May be Necessary to Handle Likely Increases to its Future Workload

Finding Summary IWCP’s regulatory responsibilities under federal and local requirements include inspecting industrial users’ facilities and issuing industrial wastewater permits for 86 Significant Industrial Users (SIUs) and 668 non-SIUs. We found that IWCP is generally keeping up with inspections and permits for SIU facilities, which are regulated under federal requirements.

However, IWCP did not achieve 100 percent compliance with these requirements. In addition, IWCP inspects and issues permits to non-SIUs that fall under local requirements—those in the Enhanced Source Control Program (ESCP)—much less frequently than those regulated under federal requirements. In fact, about six years elapsed between inspections of these facilities, on average. While local requirements do not specify how frequently facilities of industrial users in ESCP must be inspected, according to PUD management, IWCP has recently been making efforts to inspect and renew permits for these facilities. According to PUD management, these efforts will ensure program compliance ahead of changes that will result from the implementation of the Pure Water Program. In addition, according to IWCP management, the program intends to evaluate industrial users in ESCP much more frequently in the future.

PUD management attributes relatively infrequent inspections and permit renewals for industrial users in ESCP to historically prioritizing compliance with federal requirements (by focusing on SIUs and other industrial users subject to federal categorical pretreatment standards). In addition, IWCP does not directly report on inspection frequency or whether it issues permits on-time in its annual pretreatment reports. Moreover, IWCP management pointed out some staffing issues, including

turnover and vacancies last year and the need to better train staff to minimize permit processing times.

We agree that the above issues need to be addressed. Additionally, we found that the program’s underlying staffing capacity may not be enough to complete all program tasks. This is especially concerning given that the inventory of industrial users—and the program’s associated regulatory work—will grow by potentially hundreds of businesses in the future if PUD implements the audit recommendations made in Finding 1. We recommend that PUD begin tracking and monitoring inspection frequencies and on-time permit issuance, conduct a staffing analysis to determine the resources needed to achieve desired inspection frequencies, and request the required resources during the annual budget process.

Federal Regulations Require IWCP to Develop Procedures for Identifying Noncompliance; Inspections are a Part of these Procedures

Under federal regulations, IWCP is required to develop procedures to independently identify occasional and continuing noncompliance with pretreatment standards by SIUs. Such procedures include inspections to help ensure that IWCP does not rely exclusively on self-reported data when evaluating industrial user compliance.

Inspections Include Interviewing Business Representatives and Touring the Facility

A facility inspection consists of an interview with business representatives and a tour of the facility. Before the interview, inspectors review key documents in the permit file to familiarize themselves with the latest issues at the business, including a fact sheet; the latest inspection report; any enforcement activity since the last inspection or permit issuance; and updated water consumption information. During the interview, the inspector discusses the business’s permit application, water consumption, waste generating processes, wastewater composition, and volume of wastewater flow with the business representatives. During the tour of the facility, the Inspector examines the business operations that contribute wastes to the sewer system, chemical storage areas, and pretreatment facilities, and identifies an industrial waste sampling point. After the interview and tour, the Inspectors coordinates with business representatives to receive any pending items and start drafting the inspection report and the permit, which are later reviewed by supervisors.

Inspections Help Determine the Industrial User's Permit Category

The Inspector's report of the facility inspection, together with the completed permit application, form the basis for assigning the industrial user a permit category and establishing discharge limits and conditions.

Inspection Frequency Requirements Vary Across Permit Categories

Under federal regulations, IWCP is required to inspect and sample Significant Industrial Users (SIUs) at least once per year. For industrial users that are not permitted or controlled SIUs, EPA guidance states that IWCP should develop procedures for routine inspections. Therefore, and according to program management, IWCP also inspects certain types of non-SIUs at least once per year, while other industrial users are inspected as needed or based on permit expiration dates. **Appendix C** summarizes inspection requirements for different industrial users based on permit class.

IWCP is Generally Keeping Up with Inspections for Industrial Users Subject to Federal Requirements but Needs to Improve Monitoring to Reach 100 Percent Compliance

According to §403.8(f)(2)(v) of the Code of Federal Regulations (CFR), IWCP must inspect and sample the effluent from each Significant Industrial User (SIU) at least once a year. For industrial users that IWCP has classified as Non-Significant Categorical Industrial Users, IWCP must evaluate, at least once per year, whether the industrial user continues to meet the criteria in CFR §403.3(v)(2).

Within our scope period,¹¹ IWCP inspected most industrial user facilities that are subject to federal inspection requirements at least once per year.¹² Based on a random sample, we found IWCP had inspected 97 percent of these industrial users at least once per year.¹³ The average amount of time between

¹¹ Our scope included industrial users that had applied for and/or had been issued a wastewater discharge permit from IWCP between January 1, 2017 and September 28, 2020.

¹² Industrial user facilities operating under the following IWCP permit classes are subject to federal inspection requirements and must therefore be inspected at least once per year: 1; 2-SIU; 2C; 3-SIU; 3C; and 4C.

¹³ Of the 237 industrial users in our random sample, 65 are subject to federal requirements, including an inspection at least once per year. Of these, 30 were industrial users that had been issued a permit for a temporary construction project—14 of which did not have more than one inspection recorded in PIMS. However, it is possible that these industrial users may not have required more than one inspection, given the temporary nature of construction projects. Of the remaining 35 permanent industrial user facilities in our sample that are subject to federal inspection

inspections for these industrial users was 12.7 months (386 days).¹⁴

While mostly positive, these results show IWCP did not inspect all industrial users subject to federal requirements at least once per year. Therefore, to achieve full compliance, it may be helpful for the program to improve oversight in this area by formally monitoring and reporting on its inspection frequencies. As mentioned in Finding 1, there are at least two possible venues for this, including reporting this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee.

IWCP Inspects Other Industrial Users Much Less Frequently

According to the U.S. Environmental Protection Agency's (EPA's) *Industrial User Inspection and Sampling Manual for POTWs*, IWCP should also develop procedures for routine inspections of industrial users that are not permitted or controlled SIUs. In other words, even industrial users that are non-SIUs—and not necessarily subject to federal requirements—should be inspected routinely.

Non-SIU facilities are subject to local requirements—not federal requirements; IWCP is therefore not required to inspect these facilities at least once per year. However, based on a random sample, we found IWCP had inspected 81 of these industrial users at least twice, with about 5.9 years (2,167 days) elapsing between inspections, on average.¹⁵ **Exhibit 6** summarizes inspection frequency requirements and actual performance for

requirements, 34 had been inspected at least once per year, while 1—designated as a Class 1 facility—had not.

¹⁴ Since the inspection requirement is once per year (but not necessarily on the same date each year), the amount of time between inspections can be more than 12 months while still complying with the requirement. To comply with the requirement, the amount of time between inspections cannot be more than 24 months. For example, an industrial user inspected in January 2020 and December 2021 would technically meet the requirement of having been inspected at least once in 2020 and at least once in 2021.

¹⁵ Of the 237 industrial users in our random sample, 172 are non-SIUs and therefore are not subject to federal requirements, including an inspection at least once per year. Of these 172 industrial users, 104 were in a pending status as of November 2020, meaning that IWCP had not yet issued them a permit and, in many cases, had not yet conducted an initial inspection of the facility. IWCP had inspected only a smaller group of these industrial users at least once as of November 2020.

SIUs and non-SIUs based on our random sample of industrial user facilities.

Exhibit 6

IWCP Inspects SIUs Much More Frequently Than Non-SIUs Because of Different Regulatory Requirements

	Significant Industrial Users (SIUs)	Non-SIUs (Enhanced Source Control Program)
Regulatory Requirements	Federal	Local
Number of Permits*	86	668
Required Inspection Frequency	At least once per year	None
Number of industrial users inspected at least once per year (based on random sample)	34 of 35 (97 percent)	N/A
Actual Inspection Frequency (based on random sample)	12.7 months, on average	5.9 years, on average

*As of December 31, 2019.

Source: Auditor generated based on federal and local regulatory documents; information from PUD’s 2019 Pretreatment Annual Report for the Point Loma Wastewater Treatment Plant; and a random sample of industrial user facilities in IWCP’s Pretreatment Information Management System.

This is a marked difference from how frequently IWCP inspects industrial users subject to federal requirements and stems from a lack of requirements—federal or local—that specify how frequently these facilities must be inspected. As a result, according to IWCP management, the program has historically prioritized inspections and permit renewals for those industrial users that are subject to federal requirements.

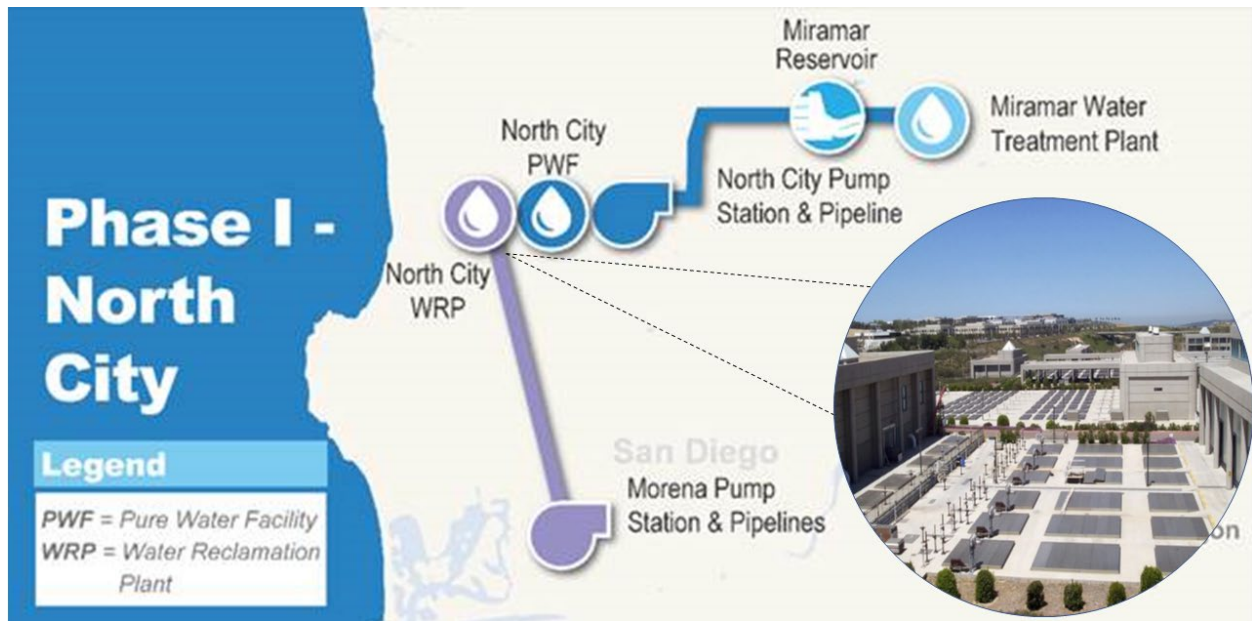
IWCP has Recently Focused on Industrial Users Not Subject to Federal Requirements as Part of Larger Pure Water Implementation Effort

However, according to IWCP management, the program in 2020 began focusing additional resources on industrial users in the Enhanced Source Control Program (those subject to local requirements)—especially those in areas tributary to the North City Water Reclamation Plant (NCWRP)—in order to ensure program compliance ahead of the expansion of NCWRP as part of the first phase of the Pure Water project. The completion of the Pure Water project will help the Point Loma Wastewater Treatment Plant achieve “secondary equivalency” by reducing

the total wastewater it processes—while avoiding the need to convert the Point Loma Wastewater Treatment Plant to secondary treatment technology and its associated costs, which are estimated at \$2 billion.¹⁶ Exhibit 7 highlights infrastructure being built in the first phase of Pure Water, which is driving IWCP’s focus on industrial users in the Enhanced Source Control Program.

Exhibit 7

IWCP is Focusing Additional Resources on Areas Tributary to the North City Water Reclamation Plant



Source: Pure Water Phase 1 Projects Fact Sheet and North City Water Reclamation Plant Fact Sheet.

IWCP Intends to Evaluate Industrial Users in the Enhanced Source Control Program More Frequently in the Future

In addition, IWCP management stated that it would like to evaluate the Enhanced Source Control Program (ESCP) industrial user facilities in some form once per year in the future. This may include requiring a self-certification from the industrial user during the permit renewal process and/or rotating inspections based on geographical areas within the Metropolitan

¹⁶ As part of Phase 1 of the Pure Water project, the North City Water Reclamation Plant is being expanded from a capacity of 30 million gallons per day to 52 million gallons per day; construction is expected to begin in mid-2021. In addition, construction on the North City Pure Water Facility is expected to begin in early 2021. In the future, upon the completion of the Pure Water project, wastewater flows will be redirected from the Point Loma Wastewater Treatment Plant and recycled at the North City Water Reclamation Plant before being sent to the new North City Pure Water Facility.

Wastewater Area. This approach would represent a shift in how frequently the program evaluates industrial users in ESCP; because evaluating them more frequently than in the past represents additional work for the program, such efforts may require additional resources.

Our fieldwork also examined some of IWCP's permitting activities. Specifically, we sought to verify whether IWCP limits the duration of permits in accordance with federal law (for industrial users that are subject to federal requirements); whether IWCP regularly renews permits prior to their expiration; and whether IWCP processes permits in a timely manner. The following sections describe our results in these areas.

Permits Cannot be Issued for a Term Longer Than Five Years, and IWCP Complies with This Limit

Under federal regulations, permits for SIUs may not be issued for a term longer than five years. In addition, §64.0505 of the San Diego Municipal Code specifies that "Permits shall be issued for a specified time period, not to exceed five years."

None of the industrial users in our sample—with active or inactive permits, and regardless of whether the industrial user is subject to federal or local requirements—were issued a permit for a term longer than five years.¹⁷ We found that IWCP generally sets permits to expire in PIMS after four years, giving the program an additional year to renew the permit before the five-year limit is reached. Therefore, we conclude that IWCP complies with permit duration limits as specified in federal and local laws.

Permits Should Not Regularly be Continued Beyond Expiration

According to the EPA's *Industrial User Permitting Guidance Manual*, permits should not routinely be continued beyond their expiration dates. Such a practice should be a stopgap measure used only in unusual situations—not in lieu of having enough staff or reissuing permits in a timely manner. Furthermore, the length of time a permit is continued beyond expiration should be kept as brief as possible.

¹⁷ Of the 237 industrial users in our random sample, 87 facilities had active permits; 39 facilities had inactive permits; and 111 facilities' permits were pending (had not yet been issued) as of November 2020.

IWCP Allowed Some Industrial Users to Operate with Expired Permits as a Result of Prioritizing Industrial Users Subject to Federal Requirements

We found that, of the industrial user facilities in our random sample requiring a permit from IWCP, 26 facilities (12 percent) operated with an expired permit prior to the issuance of a current permit.¹⁸ The vast majority of these—23 of them—were Class 2 and Class 3 non-SIU facilities, where permits had been expired for about 5.6 years (2,050 days), on average.

IWCP management acknowledged that the program allowed some industrial users to operate with an expired permit, but again explained that this was the result of having historically prioritized inspections and permit renewals for those industrial users that are subject to federal requirements. IWCP management emphasized that this was a strategic decision based on wanting first and foremost to ensure the program's compliance with federal requirements while facing the reality of resource constraints, including lacking enough staff to keep up with inspections and permit renewals for industrial users in ESCP.

In addition, according to IWCP management, the program kept some expired permits active if the industrial user had previously abided by their permit guidelines and had not changed their business process—so the effect of keeping the expired permit in place was essentially the same as issuing a new one. Finally, certain permit classes that IWCP allowed to expire require semi-annual reporting, so the program was able to maintain communication with the affected industrial users even if their permits were expired. For these reasons, IWCP management believes there was essentially no functional impact to the program or the industrial user that resulted from allowing some permits to expire. Nevertheless, IWCP management acknowledged that continuing some permits beyond expiration was not a good practice and stated that they are working on developing solutions to prevent this from reoccurring in the future.

¹⁸ Of the 237 industrial users in our random sample, 14 facilities were designated as Class 4C and 4 facilities were designated as Class 4Z. Industrial users in these classes technically do not require a permit from IWCP; instead, IWCP issues them a Conditional Permit Waiver and a Class 4Z Letter, respectively. Therefore, only 219 industrial users in our random sample require permits, and 26 of these (12 percent) operated with an expired permit prior to the issuance of a current permit.

While some efficiency improvements may help IWCP achieve more frequent assessments and permit renewals for industrial users in ESCP, effectively keeping up with inspections and permits for ESCP may ultimately be a question of program capacity. In this regard, several changes to IWCP resulting from the program assessment done in 2019 may also help. For example, reorganizing the program's structure to also focus on industrial users in ESCP, adding two Field Representative positions, and increasing Inspector pay represent potential improvements to ESCP's staffing resources and may help IWCP avoid inspection and permit renewal lapses in ESCP in the future. However, as these changes take effect, and as the program reaches a steadier state, we believe it is in IWCP's best interest to reassess its service demands and then determine whether its staffing levels are appropriate to carry out all program responsibilities, including those under ESCP.

Regularly Continuing Permits Beyond Their Expiration Creates Non-Compliance Risks and Reflects Poorly on the Program

We agree that continuing permits beyond their expiration is not a good practice. While IWCP management identified some mitigating mechanisms to ensure that an expired permit has limited effects on the industrial user or on the program's efficacy or intended outcomes, allowing industrial users to operate with an expired permit increases the risk that the industrial user does not comply with permit terms or federal or local laws that are intended to limit negative impacts on the environment. In addition, regularly allowing permits to expire sets a bad tone for a regulatory agency such as IWCP. For example, industrial users regulated by the program may recognize this practice and view it as an opportunity to violate permit terms or circumvent pretreatment requirements. Ultimately, the practice reflects poorly on the program, the department, and the public image of the City as a whole.

IWCP's Goal is to Process Permits for SIU Facilities Within Six Months

In addition to conducting inspections in a timely manner, issuing permits in a timely manner is also important. According to IWCP management, as of December 2020, the program has implemented the goal of processing permit applications for all SIU facilities within six months.¹⁹

IWCP is Generally Meeting This Goal, but Permits for Some Non-SIU Facilities Take at Least About a Year to Process

Based on a random sample of industrial users, we found IWCP is generally processing permits for SIU facilities within its six-month goal. Permits issued by the program to SIU facilities were processed in 141 days (4.7 months), on average.²⁰

However, permits issued by the program to non-SIU facilities took longer at 194 days (6.5 months), on average.²¹ In addition, a substantial portion of permits in our random sample were pending as of November 2020.²² The vast majority of these were for Class 2 and Class 3 non-SIU facilities, which fall under ESCP.²³ Pending permits had been waiting at least a year (367 days) for completion, on average, as of November 2020.²⁴ Therefore, permit processing times vary distinctly between SIUs and non-SIUs, which indicates that IWCP has prioritized SIUs over non-SIUs.

Permit Processing Delays Contribute to Permit Backlog and Increase Risk of Industrial User Non-Compliance

Permit processing delays for non-SIUs contribute to the existing backlog of pending inspections and permits. With an existing backlog, addressing pending permits for non-SIUs more slowly means the program can only inspect a portion of those facilities. This creates a risk of growing the backlog of inspections and

¹⁹ This timeframe was recommended by consultants as part of the program assessment done in 2019; according to the consultants, IWCP should begin the permit renewal process six months prior to permit expiration.

²⁰ One outlier value is excluded from this calculation; including it results in an average of 157 days (5.2 months).

²¹ Eleven outlier values are excluded from this calculation; including them results in an average of 491 days (1.3 years).

²² A total of 111 permits in our random sample of 237 (47 percent) were pending as of November 2020.

²³ Of the 111 pending permits in our random sample, 104 were for Class 2 and Class 3 non-SIU facilities.

²⁴ Sixteen outlier values are excluded from this calculation; including them results in an average of 493 days (1.4 years).

permit renewals each year. As of October 2020, 280 of the 612 (46 percent) industrial user facilities that had submitted a permit application to IWCP since 2017 were in a pending status.²⁵ IWCP management stated that the program was focused on the backlog of industrial users that are tributary to the North City Water Reclamation Plant because it affects the Pure Water project and associated permit. In addition, according to IWCP management, the program has reduced its permit backlog from four years to one year, so the current wait time is actually an improvement from past wait times. Finally, IWCP management stated that it intends to keep the backlog down to 45 days or less in the future. However, it is unclear at this time whether the program has enough resources to accomplish this.

In addition, permit processing delays increase the risk that an industrial user operates with an expired permit or without a permit altogether. This, in turn, heightens the risk of non-compliance with permit terms or federal or local laws, which are intended to limit negative impacts on the environment and on wastewater infrastructure.

**Staffing Issues Contribute
to Permit Processing
Delays**

According to IWCP management, staffing issues are also contributing to some permit processing delays. According to IWCP management, there have been some organizational and staffing changes to the program since 2019, which included adding new positions and changing workflows based on recommendations made by consultants in the 2019 program assessment. As mentioned in the Background, IWCP also received approval for a Special Salary Adjustment of 20 percent for the Industrial Wastewater Pretreatment Inspector series (Inspector I, II, and III), which took effect in July 2019. However, according to PUD management, despite this adjustment, other classification and salary changes may be helpful to improve Inspector retention within the program. Moreover, according to IWCP management, the ongoing Covid-19 pandemic also interrupted facility inspections for a period of about 4.5 months last year. In addition, the program experienced some staffing turnover and resulting vacancies in several Inspector positions last year, which disrupted inspection and permit processing workflows. According to IWCP management, they are working to

²⁵ Not all pending permits are part of the backlog; the backlog is a subset of all pending permits.

fill these vacancies and train new employees as quickly as possible.

Finally, IWCP management has identified a need to better train Inspectors to minimize back-and-forth between Inspectors and supervisors during the permit review process. IWCP management stated that they are trying to implement a 30-day time frame for a permit draft after an inspection is conducted, but that delays may occur as the draft permit goes back and forth between Inspectors and supervisors (since revisions to the draft permit are necessary if it is inaccurate). According to IWCP management, the program is working on training inspectors to draft permits more accurately the first time so that only a maximum of two revisions are necessary. However, IWCP management also stated that permit reviews are taking longer because of the existing backlog of permits and a lack of staffing resources necessary to keep up with all inspection and permitting activities.

**IWCP May Need
Additional Capacity to
Meet Future Demands**

Therefore, while IWCP management said it is working to address these issues, there may be an underlying need to assess whether the program's staffing levels are appropriate to meet all of the program's operational demands. When asked about this possibility, IWCP management stated that this kind of assessment may be beneficial in the future, once all existing positions are filled and after having the opportunity to make process improvements that maximize existing staffing resources.

We agree that it would be prudent to first make efficiency improvements that maximize existing resources. For example, filling vacant positions and providing additional training and instruction to all staff Inspectors to help minimize permit processing times are improvements that do not require additional staff positions. However, based on our observations and discussions with IWCP management, there may still be a need to assess program workloads and staffing levels even after making incremental efficiency improvements.

An important consideration underlying these issues is the potential for identifying a significant number of new industrial users—possibly hundreds—that may result from implementing

the recommendations we make in Finding 1. This could make the backlog of inspections and permits worse if the program does not have the capacity to take on additional industrial users. In addition, IWCP intends to evaluate all non-SIU facilities once per year in the future, given the potential risks these users pose to the environment and to ensure compliance with the City's NPDES and Pure Water permits. This frequency of evaluation would be significantly higher than IWCP has achieved in the past for non-SIUs and will further strain IWCP's staffing resources.

IWCP Should Establish Target Service Levels and Complete a Staffing Analysis

Implementing recommendations from Finding 1 will help IWCP develop a more complete and current inventory of industrial users. This will help IWCP better understand service demands on the program, which is necessary to establish target service levels. IWCP can also use total available staff hours, knowledge of how much time certain tasks may take to accomplish, and estimates of non-productive staff time (such as vacation time, training, sick leave, etc.). This will help IWCP better understand its available staffing resources and whether they are enough to meet target service levels. Therefore, after the program implements recommendations from Finding 1:

Recommendation 5

The Industrial Wastewater Control Program should establish target service levels for inspections and permit issuance for both Significant Industrial User (SIU) and non-SIU facilities. These targets should include (but not be limited to) how frequently the program will formally inspect or otherwise evaluate industrial user facilities for compliance with pretreatment regulations and how quickly the program should process permit applications and renew permits prior to their expiration. (Priority 2)

Recommendation 6

The Industrial Wastewater Control Program (IWCP) should develop procedures to monitor performance in achieving the target service levels described in Recommendation 5. IWCP should report this information annually to the City Council's Environment Committee or to the Independent Rates Oversight Committee, along with the information produced by implementing Recommendation 4. (Priority 2)

Recommendation 7

The Industrial Wastewater Control Program (IWCP) should complete a staffing analysis to determine the staffing level

necessary to meet the target service levels established in Recommendation 5. If this staffing level requires additional positions, IWCP should make the necessary budget requests to the City Council during the annual budget process. If the City Council does not approve these requests, IWCP should adjust its target service levels to ensure they can be met, based on current staffing resources. (Priority 1)

Conclusion

The Industrial Wastewater Control Program (IWCP) is a key component of the City's environmental management efforts and plays a critical role in complying with wastewater regulations. It is essential for securing a secondary treatment waiver from the federal government, which helps the City avoid approximately \$2 billion in upgrade costs to the Point Loma Wastewater Treatment Plant. IWCP also plays an increasingly significant role as the Pure Water Program is implemented.

Because IWCP is responsible for regulating certain industrial businesses, being aware of all those businesses is foundational to the program's success. While the program uses several methods to achieve this, we found that IWCP is unaware of potentially hundreds of businesses that may need to be regulated. Therefore, IWCP should make improvements to incorporate data-based procedures and leverage existing and more efficient and modern solutions to help ensure the program identifies all industrial users that are under its purview. However, because these changes have the potential to increase the program's workload, it will be important to assess service demands and staffing resources and ensure the program is able to meet established service levels in the future.

Our review also included timeliness aspects of IWCP's inspection and permitting activities, which are core functions of the program. We found that IWCP is generally meeting established requirements for conducting inspections and issuing permits to industrial users that fall under federal regulations. We commend IWCP for this but also recommend monitoring and reporting to help ensure full compliance. In addition, we found that IWCP inspects and permits other industrial users—those in the Enhanced Source Control Program (ESCP)—much less frequently, mainly because they fall under local regulations and have historically not been prioritized by the program. However, management stated that this is changing due to the importance of ESCP for the Pure Water Program.

While management has started shifting resources to ESCP, the existing backlog of ESCP permits combined with the likelihood of

increasing service demand (by implementing recommendations from Finding 1) means that existing resources may be insufficient to keep up with the timely regulation of all industrial users in the future. Therefore, we recommend IWCP establish target service levels, complete a staffing analysis, and request additional resources, if necessary.

Collectively, the changes we recommend are intended to help the program better understand its service demands, improve oversight of critical program outputs, and plan its future capacities. These changes can help the program improve effectiveness in protecting the City's environmental quality and wastewater infrastructure.

Recommendations

- Recommendation 1** To help maintain a complete and current inventory of industrial users, the Industrial Wastewater Control Program should update its existing policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. Specifically, the updated policies, procedures, and methods should:
- a. Include directions for analyzing business sites data from the County of San Diego to identify businesses that may potentially be regulated by the program as industrial users;
 - b. Include enhanced methods for identifying businesses outside the City of San Diego, such as increased collaboration with the permitting agencies of other local jurisdictions within the Metropolitan Wastewater Area;
 - c. Specify which staff members are responsible for conducting this new analysis and specify which staff members are responsible for employing each of the existing methods; and
 - d. Specify how often responsible staff should conduct this new analysis and specify how often responsible staff should employ each of the existing methods.
(Priority 1)
- Recommendation 2** The Industrial Wastewater Control Program should train all staff responsible for regularly updating the inventory of industrial users, as noted in Recommendation 1, on procedures to identify potential industrial users in the Metropolitan Wastewater Area.
(Priority 2)
- Recommendation 3** The Industrial Wastewater Control Program (IWCP) should work with the Economic Development Department to update the City's OpenCounter portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations. (Priority 3)

- Recommendation 4** The Industrial Wastewater Control Program (IWCP) should develop procedures to track the results of using the updated methods described in Recommendation 1, including how many potential industrial users were identified, how many were assessed, and how many were determined to need a permit from the program. IWCP should report this information to the City Council’s Environment Committee or to the Independent Rates Oversight Committee annually, along with the information produced by implementing Recommendation 6. (Priority 2)
- Recommendation 5** The Industrial Wastewater Control Program should establish target service levels for inspections and permit issuance for both Significant Industrial User (SIU) and non-SIU facilities. These targets should include (but not be limited to) how frequently the program will formally inspect or otherwise evaluate industrial user facilities for compliance with pretreatment regulations and how quickly the program should process permit applications and renew permits prior to their expiration. (Priority 2)
- Recommendation 6** The Industrial Wastewater Control Program (IWCP) should develop procedures to monitor performance in achieving the target service levels described in Recommendation 5. IWCP should report this information annually to the City Council’s Environment Committee or to the Independent Rates Oversight Committee, along with the information produced by implementing Recommendation 4. (Priority 2)
- Recommendation 7** The Industrial Wastewater Control Program (IWCP) should complete a staffing analysis to determine the staffing level necessary to meet the target service levels established in Recommendation 5. If this staffing level requires additional positions, IWCP should make the necessary budget requests to the City Council during the annual budget process. If the City Council does not approve these requests, IWCP should adjust its target service levels to ensure they can be met, based on current staffing resources. (Priority 1)

Appendix A: Definition of Audit Recommendation Priorities

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below. While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration’s responsibility to establish a target date to implement each recommendation, taking into consideration its priority. The City Auditor requests that target dates be included in the Administration’s official response to the audit findings and recommendations.

Priority Class ²⁶	Description
1	<p>Fraud or serious violations are being committed.</p> <p>Significant fiscal and/or equivalent non-fiscal losses are occurring.</p> <p>Costly and/or detrimental operational inefficiencies are taking place.</p> <p>A significant internal control weakness has been identified.</p>
2	<p>The potential for incurring significant fiscal and/or equivalent non-fiscal losses exists.</p> <p>The potential for costly and/or detrimental operational inefficiencies exists.</p> <p>The potential for strengthening or improving internal controls exists.</p>
3	<p>Operation or administrative process will be improved.</p>

²⁶ The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation that clearly fits the description for more than one priority class shall be assigned the higher priority.

Appendix B: Audit Objectives, Scope, and Methodology

Audit Objectives In accordance with the Office of the City Auditor’s Fiscal Year 2021 Audit Work Plan, we conducted a performance audit of the Public Utilities Department’s Industrial Wastewater Control Program (IWCP). Our audit objectives were to determine:

1. Whether IWCP maintains an accurate inventory of industrial users within the Metropolitan Wastewater Area; and
2. Whether and to what extent IWCP has inspected and issued a permit to eligible industrial users in the Metropolitan Wastewater Area.

Scope Our scope included IWCP’s current inventory of industrial users. Because this is constantly changing as businesses open, close, or otherwise change their operations, we focused on industrial user facilities that had applied for and/or had been issued a wastewater discharge permit from IWCP between January 1, 2017 and September 28, 2020. We updated certain permit information from PIMS when we conducted our review of inspection and permit processing times in November 2020.

Methodology To determine whether IWCP maintains an accurate inventory of industrial users within the Metropolitan Wastewater Area, we:

Audit Objective 1

- Reviewed regulatory documents and best practices to understand IWCP’s responsibilities for identifying potential industrial users within its jurisdiction.
- Reviewed program documentation about the methods IWCP uses to identify potential industrial users within its jurisdiction.
- Interviewed IWCP management and staff about how the program maintains its inventory of industrial users.
- Interviewed staff from the Development Services Department (DSD) to understand how the referral process between DSD and IWCP works.

- Reviewed local permitting websites and other sources of public business data, including business tax license data from municipalities across San Diego County and business sites data published by the County of San Diego. We decided to use the County’s business sites data because it was the most extensive and uniform dataset we could find for businesses located within the Metropolitan Wastewater Area.
- We judgmentally selected 15 business categories from the County data for review, based on whether the category was among the most-frequently occurring in PIMS and whether the category name seemed likely to include businesses of interest to the program. For categories that contained hundreds or thousands of businesses, we drew a random sample of businesses based on a 95 percent confidence level and a margin of error of 5 percent. We conducted internet searches of the business names and addresses in our sample to verify whether the business was in operation; we also looked up the business name and/or address in PIMS to determine whether IWCP had issued a permit to the business and/or whether a permit for the business was pending. We documented whether the business was located in PIMS, summarized our results, and asked IWCP management to review a subset of 50 businesses we did not locate in PIMS to confirm whether they need to be assessed by the program and whether they could potentially require a permit from IWCP.

Audit Objective 2 To determine whether and to what extent IWCP has inspected and issued a permit to eligible industrial users in the Metropolitan Wastewater Area, we:

- Reviewed regulatory documents and best practices to understand IWCP’s responsibilities for conducting inspections and issuing permits on a regular basis.
- Consulted with Wastewater Enforcement Engineers from the U.S. Environmental Protection Agency (EPA) to understand the EPA’s wastewater and pretreatment criteria related to inspections and permitting.

- Reviewed program documentation about how IWCP staff conduct inspections and issue permits to industrial users within its jurisdiction.
- Observed inspections taking place and discussed the permitting process with inspectors.
- Reviewed permit files, including electronic permitting data from PIMS and some physical permit files. We reviewed permitting data in PIMS for each of the industrial user permits in our random sample. During our review, we verified and/or recorded key dates, including: when IWCP received a permit application; when IWCP conducted inspections; when a permit was drafted by an inspector; when a permit draft was reviewed by a supervisor; when a final permit was issued by a program manager; and when a permit expired. We then calculated several key metrics, including inspection and permit frequency; permit duration; frequency and duration of expired permits; permit processing times; and wait times for pending permits.
- Interviewed IWCP management and staff to discuss our results and better understand some of the reasons behind permit processing delays and the practice of sometimes continuing some permits beyond expiration.

Data Reliability Testing

We tested the reliability of permit data from PIMS to ensure it was sufficiently complete and accurate for the purpose of forming conclusions about IWCP's inventory of industrial users and IWCP's inspection and permitting frequencies. We did this by selecting a random sample of industrial user permits from the dataset provided by IWCP based on a 95 percent confidence level and a margin of error of 5 percent. We then verified the accuracy of the information in the dataset by comparing values from the dataset to the information recorded in PIMS; we did this for each of the industrial user permits in our random sample and across several key fields. We also verified the accuracy of inspection and permit dates in PIMS by confirming that inspections were reviewed by a supervisor; that an inspection report was attached to the electronic permit file; and that a Program Manager signed off on the final permit.

Internal Controls Statement Our review of internal controls was limited to those controls relevant to the audit objectives described above. Specifically, we reviewed policies and procedures documents; interviewed department management; observed inspections taking place; and reviewed permitting data to understand how the program maintains its inventory of industrial users and how it ensures inspections and permits are completed in a timely manner.

Compliance Statement We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix C

Summary of Inspection and Permit Requirements for Each Industrial User Class

Permit Class	Permit Description	Significant Industrial User?	Subject to federal categorical pretreatment standards?	Permit Required?	Minimum Inspection Frequency	Maximum Permit Term
1	Process subject to federal categorical pretreatment standards; requires source control, pretreatment, or both.	Yes	Yes	Yes	Once per year	5 years
2	Discharge contains some toxic constituents but not subject to federal categorical pretreatment standards; numeric limits or Best Management Practice requirements apply; includes groundwater remediation projects.	Yes, if flows > 25,000 gallons per day	No	Yes	SIU: Once per year Non-SIU: "As needed" (when renewing permit)	5 years
2C	Process subject to federal categorical pretreatment standards but does not discharge to sewer ; discharge contains some toxic constituents that are not subject to federal categorical pretreatment standards.	No	Process - Yes Discharge - No	Yes	Once per year	5 years
2F	BMP Discharge Authorization – silver-rich solutions	No	No	Discharge Authorization	Randomly	5 years; re-certification every 6 months
2Z	Process subject to federal categorical pretreatment standards but does not generate process wastewater ; discharge contains some toxic constituents that are not subject to federal categorical pretreatment standards.	No	Process - Yes Discharge - No	Yes	None	5 years

Permit Class	Permit Description	Significant Industrial User?	Subject to federal categorical pretreatment standards?	Permit Required?	Minimum Inspection Frequency	Maximum Permit Term
3	Conventional pollutants; numeric limits or BMP requirements apply; includes construction dewatering projects.	Yes, if flows > 25,000 gallons per day	No	Yes	SIU: Once per year Non-SIU: "As needed" (when renewing permit)	5 years
3C	Process subject to federal categorical pretreatment standards but does not discharge to sewer ; discharge contains conventional pollutants.	No	Process - Yes Discharge - No	Yes	Once per year	5 years
3Z	Process subject to federal categorical pretreatment standards but does not generate process wastewater ; discharge contains conventional pollutants.	No	Process - Yes Discharge - No	Yes	None	5 years
4	Sanitary flow only and Class 2 and Class 3 facilities with flows below permitting thresholds.	No	No	No	N/A	N/A
4C	Process subject to federal categorical pretreatment standards but does not discharge to sewer ; annual requirement for Conditional Permit Waiver is inspection by IWCP and the owner to submit a Certification of Zero Discharge of Federally Regulated Wastewater.	No	Process - Yes Discharge - No	Conditional Permit Waiver	Once per year	1 year
4D	BMP Discharge Authorization – dry cleaning solvents	No	No	Discharge Authorization	Randomly	5 years; re-certification every 6 months

Permit Class	Permit Description	Significant Industrial User?	Subject to federal categorical pretreatment standards?	Permit Required?	Minimum Inspection Frequency	Maximum Permit Term
4M	BMP Discharge Authorization – dental amalgams	No	No	Discharge Authorization	Randomly	5 years; re-certification every 6 months
4Z	Process subject to federal categorical pretreatment standards but does not generate process wastewater ; annual requirement is inspection by IWCP and the owner to submit a Certification of Zero Regulated Wastewater Generated.	No	Process - Yes Discharge - No	Class 4Z Letter	None	1 year
5	Sanitary flow only; minimal potential to ever generate industrial wastewater.	No	No	No	N/A	N/A

Note: The table does not include permit classes for trucked waste because these are not the main focus of IWCP’s regulation of industrial users through permitting, monitoring, and enforcement activities.

Source: Auditor generated based on 2019 Annual Pretreatment Report for the Point Loma Wastewater Treatment Plant and information received from the Public Utilities Department.



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: March 9, 2021

TO: Andy Hanau, City Auditor, Office of the City Auditor

FROM: Shauna Lorance, Director, Public Utilities Department

SUBJECT: Management Response Performance Audit of the Public Utilities Department's Industrial Wastewater Control Program – Part II

The purpose of this memorandum is to provide Management's response to the recommendations to the City Auditor's report entitled *Performance Audit of Public Utilities Department's Industrial Wastewater Control Program - Part II*.

The San Diego Public Utilities Department (Department) would like to provide information on changes that have started to be implemented in the Industrial Wastewater Control Program (IWCP) based on an independent consultant review that coincides with similar recommendations for the Performance Audit. Beginning in 2017, the Department hired outside consultants to complete a comprehensive review to evaluate the IWCP and ensure the Program would have the ability to meet the needs associated with the Pure Water Program. The final consultant report provided multiple recommendations, including restructuring IWCP to form two inspection groups, one for enhanced source control (ESC) and another for significant industrial users (SIU). After restructuring and reviewing the ESC, it became clear that a significant number of ESC inspections were behind schedule. Thus, IWCP has focused to fix the backlog of ESC inspections, creating efficiencies for drafting and issuing permits in a timely manner. Subsequently, IWCP has been able to reduce the backlog of 400 inspections in the Pure Water area down to 225 inspections over the last year.

We appreciate the opportunity to provide comments on this audit and thank the City Auditor's team for their cooperation and professionalism throughout the audit process. Our responses to the audit recommendations are below.

RECOMMENDATION #1: To help maintain a complete and current inventory of industrial users, IWCP should update its existing policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. Specifically, the updated policies, procedures, and methods should:

- a. Include directions for analyzing business sites data from the County of San Diego to identify businesses that may potentially be regulated by the program as industrial users.

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- b. Include enhanced methods for identifying businesses outside the City of San Diego, such as increased collaboration with the permitting agencies of other local jurisdictions within the Metropolitan Wastewater Area.
- c. Specify which staff members are responsible for conducting this new analysis and specify which staff members are responsible for employing each of the existing methods.
- d. Specify how often responsible staff should conduct this new analysis and specify how often responsible staff should employ each of the existing methods. (Priority 1)

Management's Response: Agree. IWCP includes information in our annual regulatory report regarding our ability to locate new businesses or discover businesses that have never been evaluated by IWCP. IWCP has consistently met this regulatory requirement. Additional avenues to support our current methods are appreciated and will be incorporated into our processes for businesses within San Diego city limits.

Additionally, IWCP agrees that improving the process for evaluating potential businesses in the Participating Agencies is needed. IWCP will work in partnership with the Participating Agencies to ensure there are written procedures for business referrals to IWCP for further evaluation to determine if they require a permit.

Written policy development, including the identification of staff roles and responsibilities will be developed for incorporation in the next annual reporting period that begins in January 2022.

Target Implementation Date: IWCP plans to implement these changes and be able to demonstrate use of these improvements by July 2022.

RECOMMENDATION #2: IWCP should train all staff responsible for regularly updating the inventory of industrial users, as noted in Recommendation 1, on procedures to identify potential industrial users in the Metropolitan Wastewater Area. (Priority 2)

Management's Response: Agree. IWCP will train staff on revised and/or new policies and procedures.

Target Implementation Date: IWCP expects to train all staff responsible once new policies/procedures are developed by January 2022.

RECOMMENDATION #3: IWCP should work with the Economic Development Department to update the City's Open Counter portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations. (Priority 3)

Management's Response: Agree. IWCP was unaware of this opportunity and thanks the Auditors for identifying this as an option. IWCP management has coordinated with the Economic Development Department (EDD) and learned that EDD is in the process of issuing

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a solicitation for Open Counter. Once the City has selected a future software provider, EDD has agreed to include IWCP permits as part of Open Counter in order to better evaluate potential businesses.

Target Implementation Date: EDD is advertising the request for proposal in March 2021 and expects to evaluate and award in June 2021. IWCP will work with EDD to include IWCP permits when software is implemented

RECOMMENDATION #4 The Industrial Wastewater Control Program (IWCP) should develop procedures to track the results of using the updated methods described in Recommendation 1, including how many potential industrial users were identified, how many were assessed, and how many were determined to need a permit from the program. IWCP should report this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee annually, along with the information produced by implementing Recommendation 6. (Priority 2)

Management's Response: Agree. IWCP currently reports the manners in which the Program evaluates potential permittees to meet regulatory requirements. IWCP will include the new mechanisms and data in this recommendation to develop the report. Since the regulations do not require IWCP to report this type of information in the annual reports, IWCP will document the steps taken as supporting documentation for the report. IWCP will plan to present the report at IROC.

Target Implementation Date: March 2023

RECOMMENDATION #5 IWCP should establish target service levels for inspections and permit issuance for both SIU and non-SIU facilities. These targets should include (but not be limited to) how frequently the program will formally inspect or otherwise evaluate industrial user facilities for compliance with pretreatment regulations and how quickly the program should process permit applications and renew permits prior to their expiration. (Priority 2).

Management's Response: Agree. IWCP has regulatory requirements for inspections and permit issuance for SIU facilities and is currently meeting these regulatory thresholds. IWCP will continue to perform 100% of inspections annually for SIU facilities.

For non-SIU facilities, IWCP agrees to implement the new procedures described in Recommendation 1. It is estimated that the new protocols will include an evaluation of approximately 30,000 potential businesses. While utilizing the new procedures, ESC will establish goals and resource levels needed for evaluating these potential new businesses.

Target Implementation Date: July 2022

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RECOMMENDATION #6 The Industrial Wastewater Control Program (IWCP) should develop procedures to monitor performance in achieving the target service levels described in Recommendation 5. IWCP should report this information annually to the City Council's Environment Committee or to the Independent Rates Oversight Committee, along with the information produced by implementing Recommendation 4. (Priority 2)

Management's Response: Agree. As stated in Recommendation #4 and #5, IWCP will document the mechanisms the audit recommendations are requesting as back up to the annual report to achieve the target service levels. IWCP will present the report at IROC to provide an update on progress implementing the new processes

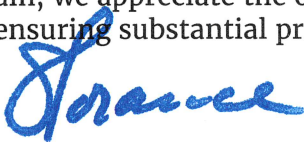
Target Implementation Date: July 2022

RECOMMENDATION #7 IWCP should complete a staffing analysis to determine a staffing level necessary to meet the target service levels established in Recommendation 5. If this staffing level requires additional positions, IWCP should make the necessary budget requests to the City Council during the annual budget process. If the City Council does not approve these requests, IWCP should adjust its target service levels to ensure they can be met, based on current staffing resources. (Priority 1)

Management's Response: Agree. In 2019-2020, the IWCP added 6 new positions to the program based on the independent consultant recommendations. Staff turnover and the pandemic have prevented the program from being fully staffed since the creation of these new positions. Once on-going hiring processes are complete and new staff are trained during Fiscal Year 2022, IWCP will complete a staffing analysis to determine whether additional positions may be needed. If additional staff are required, a request for new positions will be requested during the Fiscal Year 2024 budget development process.

Target Implementation Date: Staffing analysis will be completed by July 2022. If new staff are needed, they will be requested in the Fiscal Year 2024 budget development process.

Again, we appreciate the opportunity to provide comments on this audit. PUD is committed to ensuring substantial progress is made on addressing these findings.



Shauna Lorance
Director, Public Utilities Department

cc: Honorable City Attorney, Mara Elliott
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