DEC 30 2010

Ms. Heidi Geiger, P.E.
Senior Environmental Inspector
Environmental Services Department
Watershed Protection
170 W. San Carlos Street
San Jose, CA 95113

Dear Ms. Geiger:

PRETREATMENT COMPLIANCE AUDIT (PCA) REPORT TRANSMITTAL, INDUSTRIAL PRETREATMENT PROGRAM, CITY OF SAN JOSE, SANTA CLARA COUNTY

Enclosed for your review are the PCA Summary Report, Report of Noncompliance Data Entry Worksheet, and Site Visit Data Sheets for the City of San Jose's Industrial Pretreatment Program. PG Environmental, LLC and Tetra Tech Inc., which are contractors for the U.S. Environmental Protection Agency, conducted the PCA of the City's Industrial Pretreatment Program on October 28 and 29, 2009.

We apologize for the long delay in sending the above documents. We will do our best to prevent delays in the future. In cases where a delay is unavoidable, we will keep you informed of the status of the reports and when you could anticipate receiving them. We recognize that timely receipt of the reports is important since they contain required and recommended actions that can assist in improving the City's Industrial Pretreatment Program, as is the case in the 2009 PCA.

If you have any questions, you may contact Michael Chee of the San Francisco Bay Regional Water Quality Control Board at (510) 622-2333 or mchee@waterboards.ca.gov. You may also contact Jenny Chen of the State Water Resources Control Board at (916) 341-5570 or hjchen@waterboards.ca.gov.

Sincerely,

[Signature]
Philip Isidrena
Senior Water Resource Control Engineer
NPDES Wastewater Unit
Division of Water Quality

Enclosures: (10)

(cc: See next page)
(cc: Continuing page)

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Pretreatment Compliance Audit

Summary Report

Discharger: City of San Jose
Santa Clara County
NPDES Permit No. CA 0037842

Location: Environmental Services Department
Watershed Protection
170 W. San Carlos Street
San Jose, CA 95113

Contact(s): John Mukhar, Senior Environmental Engineer
Heidi Geiger, Senior Environmental Engineer

Audit Dates: October 28–29, 2009

Audited By: Danny O’Connell, PG Environmental
Brenner Perryman, PG Environmental
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1. Executive Summary
The San Francisco Bay Regional Water Quality Control Board (Water Board), with assistance from Tetra Tech, Inc., and PG Environmental, LLC, conducted a Pretreatment Compliance Audit (PCA or audit) of the City of San Jose (City), on October 28–29, 2009. The last Pretreatment Compliance Inspection (PCI) of the City's pretreatment program had been performed on January 2004. This report describes the primary concerns generated by the audit.

The City's staff manages a pretreatment program that consists of 329 permitted nondomestic users. Of those dischargers, 141 are classified as significant industrial users (SIUs) as defined at Title 40 of the Code of Federal Regulations (CFR) section 403.3(v). The SIUs include 130 categorical industrial users (CIUs) and 11 noncategorical SIUs. The City also permits 21 zero-discharging CIUs. The members of the City staff appear to have a good general grasp of the pretreatment requirements, and the City has an impressive list of pollution-prevention programs and outreach programs. In a number of areas, however, the program needs to be improved.

The audit revealed that the City is not adequately characterizing its nondomestic users. For example, even though the City classified Kerney Pattern Works and Foundry as a zero-discharger, it is actually discharging some process wastewater. In addition, the audit team found several instances where the City is not appropriately applying pretreatment standards and requirements. Furthermore, the audit team found several deficiencies with the City's inspection procedures and that the adequacy of inspection procedures could vary significantly between different inspectors.

In general, the City's permits require some minor revisions. The permits do not adequately require nondomestic users to report all significant changes, including decreases in production or wastewater discharged. Coast Engraving's permit does not list the categorical effluent limits that would apply if the facility was to discharge process water. Finally, the audit team noted that the City's fact sheets do not contain enough information to adequately assess whether a discharger is an existing or new source.

Furthermore, a number of deficiencies that the audit team noted during its site visits to several of the City's permitted facilities require follow up by City personnel. The audit team also found that the City failed to identify and take appropriate enforcement actions for several instances of noncompliance.

Finally, the audit team reviewed the City's revised sewer use ordinance (SUO) and enforcement response plan (ERP) as part of the audit. The audit team found a couple minor inconsistencies in those documents that must be corrected.

2. Introduction
The PCA consisted of three parts: an interview of City staff, a review of the pretreatment program files, and site visits to various permitted industries. The
interview included a discussion with several members of the City’s Environmental Services Department regarding the program in general, the City’s compliance sampling and inspection procedures and their frequency, and enforcement issues. The file review consisted of examining the files of several nondomestic users. To provide a general overview of the pretreatment program, the files were selected on the basis of the nondomestic users’ classifications. The files of the following dischargers were reviewed during the PCA:

- Advance Surface Finishing, Inc. (CIU subject to 40 CFR 433.17)
- Clean Harbors (CIU subject to 40 CFR 437.15)
- Coast Engraving, Inc. (zero-discharging CIU subject to 40 CFR Part 413\(^1\))
- J & B Enterprise (zero-discharging CIU subject to 40 CFR 421, subpart X)
- Jennings Technology Corp. (CIU subject to 40 CFR 433.15 and 40 CFR 468.14)
- Mohawk Packing (noncategorical SIU)
- Prudential Overall Supply (noncategorical SIU)
- Triad Tool & Engineering (zero-discharger subject to 40 CFR Part 464)

Several permitted dischargers were also visited as part of this audit. Auditors from Tetra Tech, Inc., and PG Environmental, LLC, accompanied the City’s inspectors to assess whether inspection procedures are adequate and whether the dischargers are classified correctly. To ensure a representative cross section of the City pretreatment program, the dischargers were selected for site visits on the basis of classification. The facilities of the following dischargers were visited during the PCA:

- Advance Surface Finishing (CIU subject to 40 CFR Part 433)
- Allergen, Inc. (CIU subject to 40 CFR 439.17)
- ALSCO (noncategorical SIU)
- APCT, Inc. (CIU subject to 40 CFR 433.17)
- Babbit Bearing Company (zero-discharging CIU subject to 40 CFR 433.17)
- Clean Harbors (CIU subject to 40 CFR 437.15)
- Coast Engraving, Inc. (zero-discharging CIU subject to 40 CFR Part 413\(^1\))
- HED Battery Corporation (zero-discharging CIU subject to 40 CFR part 461)
- Jennings Technology Corporation (CIU subject to 40 CFR 433.15)
- Kearney Pattern Works and Foundry (zero-discharging CIU subject to 40 CFR Part 464\(^1\))
- Micrel (CIU subject to 40 CFR Part 469)
- Mohawk Packing (noncategorical SIU)

\(^1\) As classified by the City.
This report summarizes the overall findings of the audit and describes those program elements that are not consistent with federal pretreatment program requirements. In addition, the report provides recommendations to enhance the effectiveness of program implementation and enforcement.

2.1 Size of Program
The City's pretreatment program consists of 329 permitted nondomestic users, 141 of which are classified as SIUs as defined at 40 CFR 403.3(t). The SIUs include 130 CIUs subject to federal categorical pretreatment standards and 11 noncategorical SIUs. The City also permits 21 zero-discharging CIUs. The remaining 167 permitted nondomestic users consist of auto shops, photo processors, noncategorical food processors, hospitals, theme parks, research and development facilities, and other nonsignificant dischargers.

2.2 Description of the City's Service Area
The City owns and operates the San Jose/Santa Clara Water Pollution Control Plant (WPCP). The WPCP serves a population of more than 1.4 million residents and has a service area of over 300 square miles. The service area includes the City, city of Santa Clara, County Sanitation Districts No. 2 and 3, West Valley Sanitation District (cities of Campbell, Saratoga, Monte Sereno, and town of Los Gatos), Burbank Sanitary District, Cupertino Sanitary District, and Milpitas Sanitary District.

City personnel indicated that during revisions to the City's SUO, the County Sanitation Districts No. 2 and 3 and Burbank Sanitary District will have to revise their respective local ordinances. The City has direct oversight authority for all the other contributing jurisdictions.

3. Pretreatment Program Modifications
The federal pretreatment regulations at 40 CFR 403.18 require the City to notify the Water Board of any modifications it intends to make to its pretreatment program.

The City has modified several aspects of its pretreatment program. The City has modified its legal authority to include fats, oil, and grease (FOG) and dental amalgam programs. In addition, the City has revised its SUO, ERP, and permit
template. City personnel indicated that all the program modifications were considered nonsubstantial and were submitted to the Water Board for review before implementation.

In 2008–2009 the City added a FOG program, and a dental amalgam program to the pretreatment program. Since implementing the FOG program, the City has inspected all the food service establishments in its immediate jurisdiction and is planning to complete inspections of all the food service establishments in its contributing jurisdictions in the next 2 to 3 years. The City has 11 inspectors assigned to the FOG program to conduct those inspections. The frequency of the inspections is based on the number of areas of concern at each facility. The following table outlines the City’s FOG program inspection frequency.

<table>
<thead>
<tr>
<th>Number of areas of concern</th>
<th>Inspection frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Once every 3 years</td>
</tr>
<tr>
<td>1</td>
<td>Once every 2 years</td>
</tr>
<tr>
<td>More than 1</td>
<td>Once per year</td>
</tr>
</tbody>
</table>

The City’s dental amalgam program requires all dental facilities to install amalgam separators and implement best management practices. City personnel indicated that about 17 percent of all dental facilities have responded to the City’s initial survey, reporting that they already installed amalgam separators. In addition, the City is in the process of permitting all the dentists in its service area.

4. Local Limits

The federal pretreatment regulations at 40 CFR 403.5(c) require publicly owned treatment works (POTWs) to develop and enforce local limits to implement the general and specific prohibitions at 40 CFR 403.5(a) and (b). The pretreatment regulations also require POTWs to continue to develop these local limits as necessary and effectively enforce the limits. Furthermore, the National Pollutant Discharge Elimination System regulations at 40 CFR 122.44(j)(2)(ii) require POTWs to provide a written technical evaluation of the need to revise local limits following permit issuance and reissuance.

The City revised and adopted new local limits in 2008. The City developed different sets of local limits for standard dischargers and low-flow dischargers. The City defines a standard discharger as a nondomestic user who is not a low-flow discharger, and a low-flow discharger is defined as any nondomestic discharger whose average process flow (as shown in the user’s application to discharge and measured as a rolling 6-month average) is less than 1,000 gallons per day (gpd). The City established limits for antimony, arsenic, beryllium, cadmium, chromium (total), copper, cyanide, lead, mercury, nickel, oil and grease, pH, phenol and derivatives, selenium, silver, and zinc.

The U.S. Environmental Protection Agency (EPA) Region 9 and the Water Board approved the City’s revised local limits on June 20, 2007, and June 28, 2007, respectively. Therefore, no additional requirements are necessary regarding the City’s local limits.
5. **Legal Authority**

The regulations at 40 CFR 403.8(f) require that every POTW subject to the national pretreatment program have the necessary legal authority to apply and enforce section 307(b) and (c) and section 402(b)(8) of the Clean Water Act.

The City adopted a revised SUO on December 4, 2007. Subsequently, the city of Milpitas, the city of Santa Clara, the West Valley Sanitation District, and the Cupertino Sanitary District also adopted the City’s revised SUO. Because the City is the direct oversight authority for the County Sanitation Districts No. 2 and 3 and Burbank Sanitary District, any changes to the City’s SUO are automatically adopted by the tributary agencies.

As part of the PCA, the audit team reviewed the City’s SUO and ERP to ensure that they contain all the minimum federal requirements. The following sections describe the findings of those reviews.

5.1 **Required Streamlining Rule Changes**

On October 13, 2005, EPA promulgated several changes to the general pretreatment regulations (streamlining rule). Many of the streamlining provisions are changes that the POTW may adopt at its discretion. A few of the provisions, however, require the POTW to revise its legal authority. The required changes are as follows:

- 40 CFR 403.8(f)(1)(iii)(B)(6): clarification that slug control requirements must be referenced in SIU control mechanisms
- 40 CFR 403.8(f)(2)(viii)(A-C): revisions to the significant noncompliance (SNC) definition
- 40 CFR 403.12(g): modifications to the sampling requirements and clarification of the requirement to report all monitoring results

Section 15.14.765 (Permit Conditions) of the City’s Sewer Use Regulations specifies that its permits may include conditions to protect against accidental discharges. The City’s definition of accidental discharges includes slug discharges. Therefore, no additional revisions are necessary to the SUO to clarify that slug control requirements must be referenced in the SIU control mechanisms.

Section 15.14.415 (Significant Noncompliance) of the City’s Sewer Use Regulations contains the revised definition of SNC. The revised definition of SNC is consistent with the federal definition. Therefore, no additional action is necessary.

Chapter 15.14 of the City’s Sewer Use Regulations does not specifically outline all nondomestic discharger reporting requirements. Section 15.14.695E (Discharge Reports) states that the director may require dischargers to submit additional reports as necessary to allow the City to evaluate the discharger’s ability to comply with the City’s SUO. Even though that statement gives the City
the authority to require any additional reports, such as reporting all monitoring results as required 40 CFR 403.12(g), the statement does not outline what types of additional reporting may be necessary. To ensure that all nondomestic dischargers are aware of all reporting requirements, the City should include in its SUO either a reference to the reporting requirements listed at 40 CFR 403.8 and 403.12, or a list of the minimum federal reporting requirements.

5.2 Definitions

Even though the City’s SUO defines all necessary terms used in the Sewer Use Regulations, the City’s definition of significant change does not include decreases in a nondomestic discharger’s production or flow rate. Section 15.14.405 (Significant Change) defines significant change as any of the following:

- A flow that exceeds the expected peak flow as shown in the sewage treatment plant connection allocation for the property on which the industrial user is located
- An increase in average process flow of 25 percent over the industrial user’s average process flow for the dischargers’ most immediate preceding compliance period
- Adding or deleting process discharge or sample points

In addition to those conditions, the City should also consider decreases in production or discharge flow rates as a significant change. For example, if a discharge is subject to production-based standards, a decrease in production would result in a decrease in the allowable pollutant loading that can be discharged. Therefore, the auditors strongly recommend that the City revise its definition of significant change to include decreases in production and discharge flow.

5.3 Reporting Requirements

The City’s SUO does not specify the required federal certification statement [40 CFR 403.12(l)] that must be submitted with baseline monitoring reports, report on compliance with categorical pretreatment standard deadline, and periodic compliance reports. Section 15.14.745 of the SUO specifies only who is required to sign the report, but it does not contain the actual certification statement. Therefore, the City is required to revise the SUO to include the required certification statement that must be submitted with reports.

The City’s SUO provides the director the authority to require any information to determine whether a permit should be issued (Section 15.14.750, Additional Information). The SUO, however, does not specifically list all the federally required reports. Those reports consist of the following:

- Baseline monitoring reports [40 CFR 403.12(b)]
- Compliance schedule progress reports [40 CFR 403.12(c)]
- Compliance report on categorical standards deadlines [40 CFR 403.12(d)]
• Periodic reports on continued compliance [40 CFR 403.12(e) and (h)]
• Notice of potential problems, including slug loading [40 CFR 403.12(f)]
• Notification of violation and resampling requirement [40 CFR 403.12(g)]
• Notification of substantial change in discharge [40 CFR 403.12(j)]
• Notification of hazardous waste discharge [40 CFR 403.12(p)]
• Notification of changes affecting potential for a slug discharge [40 CFR 403.8(f)(2)(vi)].

Even though the City's SUO gives the director a broad authority to require those reports, a discharger would not be able to be proactive in collecting and submitting the required reports. To ensure that all nondomestic dischargers are aware of all reporting requirements, the City should either include a reference to the reporting requirements listed at 40 CFR 403.8 and 403.12, or include in its SUO a list of the minimum federal reporting requirements.

5.4 Pretreatment Standards-Local Limits
Section 15.14.585 of the City's SUO lists the City's local limits. That section, however, does not specify that the director has the authority to develop additional limitations as deemed necessary. Therefore, the audit team recommends that the City revise its SUO to include a provision that allows the director to develop and implement additional limits as deemed necessary.

6. Nondomestic User Characterization
The federal pretreatment regulations at 40 CFR 403.8(f)(2) require that POTWs develop and implement procedures to identify and locate industrial users that might be subject to the local pretreatment program. Those procedures must also include proper categorization of all SIUs as defined at 40 CFR 403.3(v).

The audit team found the City's procedures for identifying and locating nondomestic dischargers to be adequate. The City identifies nondomestic dischargers on an ongoing basis. The City conducts annual business license reviews, in addition to regular stormwater inspections and phonebook reviews. In the City's other service jurisdictions, the City has access to new business license applications and high water usage bills (city of Santa Clara and Milpitas Sanitary District). In all the remaining jurisdictions, the City conducts plan checks.

The City, however, is not adequately characterizing its nondomestic dischargers. For example, before this audit, the City had permitted Coast Engraving as a zero-discharging CIU, and it reissued the facility a zero-discharge permit in 2008. In August 2009 because the City had a change in inspectors and their assigned facilities, the newly assigned inspector noticed that the facility was discharging federally regulated process wastewater. The inspector indicated that the City intends to reclassify the discharger as a discharging CIU. The City is required to ensure that it correctly classifies Coast Engraving and issues it a correct permit as necessary.
In addition, the Kearney Pattern Works and Foundry files indicate that the facility is permitted as a zero-discharging CIU subject to 40 CFR Part 464, but the site visit revealed that the facility has a small deburring/tumbling operation that periodically discharges to the City. The facility representative indicated that the tumbling operation is in use for only one client but did not have a documented frequency of use or documented volume of wastewater discharged to the City. The City is required to formally evaluate the deburring/tumbling operation and ensure that the City adequately classifies, permits, and monitors all process wastewater discharges.

7. Control Mechanisms

The federal pretreatment regulations at 40 CFR 403.8(f)(1)(iii) require POTWs to control through control mechanisms (permits or other similar means) the discharges from nondomestic users to ensure compliance with applicable pretreatment standards. The control mechanisms are required, at a minimum, to include the following:

- Statement of duration (in no case more than 5 years)
- Statement of nontransferability
- Effluent limits
- Self-monitoring, sampling, reporting, and record-keeping requirements
- Statement of penalties
- Compliance schedules (if applicable)
- Required resampling within 30 days after noticing a violation
- Notification requirements
  - Notice of slug loadings
  - Notification of spills, bypasses, or upsets
  - Notification of significant change in discharge
  - Notification within 24 hours after noticing a violation

Permits for CIUs must also properly use the combined wastestream formula, properly convert mass-based limits to concentration-based limits, and properly apply production-based limits (if applicable) and must include a prohibition on dilution as a substitute for treatment.

The City uses a tiered local limit system to control its nondomestic users. The tiered system is divided into two categories: a standard discharger and a low-flow discharger. A low-flow discharger is any user whose average process wastewater flow, as shown in the discharger’s application to discharge and measured as a rolling 6-month average, is less than 1,000 gpd. A standard discharger is any nondomestic user that is not classified as a low-flow discharger. The difference in local limits between the two categories is that the standard discharger has more stringent copper and nickel local limits (2.3 milligrams per liter [mg/L] and 0.5 mg/L versus 2.7 mg/L and 2.6 mg/L, respectively).
7.1 **Expired Permits**
The file review revealed that Advanced Surface Finishing's permit expired on September 15, 2009. The permit was issued on December 28, 2007, and later amended on January 9, 2008. According to section 15.14.725 of the City's SUO, no SIU is allowed to discharge into the City's sanitary system except in accordance with a discharge permit. Because Advance Surface Finishing does not have an unexpired permit, the facility is in violation of the City's SUO. Therefore, the City is required to ensure that the Advance Surface Finishing is not discharging without a valid permit or the City should reissue Advance Surface Finishing a permit to ensure that the facility is not in violation of the City's SUO.

7.2 **Notification of Significant Change**
The permits reviewed do not adequately require nondomestic users to report all significant changes. The federal regulations at 40 CFR 403.12(j) require nondomestic users to promptly notify the City in advance of any substantial change in the volume or character of pollutants in their discharge. All the permits reviewed require, both on the front cover and in the general conditions, that the discharger notify the City of 20 percent or more increase in flow or production. But it does not require the discharger to notify the City if there are any decreases in flow or production. The audit team reminds the City that some categorically regulated industries are regulated via production-based limits. Significant decreases in production affect the allowable pollutant loadings that the facility is allowed to discharge. Therefore, the City is required to ensure that its requirement of notification of significant change also includes decreases in production and flow.

7.3 **Categorical Standards**
Coast Engraving's zero-discharge permit lists the applicable local limits, but it does not list the categorical effluent limits that would apply if the facility was to discharge process wastewater. Even though the facility is permitted as a zero-discharger, it should be aware of all discharge requirements that would apply to the wastewater it generates. Therefore, the auditors strongly recommend that the City includes in all zero-discharging CIU permits all applicable effluent limits—both local limits and categorical effluent limits.

7.4 **Application of Most Stringent Limit**
The Jennings Technology Corporation's permit does not specify which limits (local limits or the adjusted categorical limits) are more stringent at sampling point 002. City personnel indicated that both set of limits are applicable at sampling point 002 and that the discharger could be in violation of both sets of limits. Because that is not clearly reflected in the permit, the auditors strongly recommend that the City revise Jennings Technology Corporation's permit to clearly reflect that both the local limits and the adjusted categorical limits are applicable at sampling point 002 and that the discharge could violate both sets of limits at the sampling point. Furthermore, the auditors recommend that the City clearly document this rationale within the facility's fact sheet.
7.5 Fact Sheets
The City has developed fact sheets for each of its SIUs. The fact sheets, however, do not contain enough historical data to track or ensure that a discharger is correctly classified as an existing or new source. Therefore, the audit team strongly recommends that the City include in each of the SIU fact sheets a timeline outlining the first date of production and any subsequent changes to the process line or facility.

8. Application of Pretreatment Standards and Requirements
The federal pretreatment regulations at 40 CFR 403.8(f)(1) require the City to have the legal authority to require compliance with applicable pretreatment standards and requirements, and to ensure compliance with these standards and requirements through the use of control mechanisms such as permits.

The PCA revealed several instances where the City is inappropriately applying pretreatment standards and requirements. For example, Clean Harbors (a CIU subject to 437.15, centralized waste treatment) permit includes a categorical effluent limit for selenium. The categorical effluent limits in 40 CFR 437.15 do not include a limit for selenium. The City is required to revise Clean Harbors' permit to include the correct list of applicable categorical effluent limits.

As noted in section 6 of this report, the City has incorrectly classified Coast Engraving as a zero-discharging CIU subject to 40 CFR Part 413. During the PCA, City personnel indicated that they are in the process of issuing a discharge permit to Coast Engraving and recategorizing the facility as a CIU subject to 40 CFR 433.17 (metal finishing, new source). During the site visit, however, the facility representative indicated that the site has been in operation since the early 1980s and that the facility has not made changes to its operations or discharge practices since then. Therefore, the City's reclassification of Coast Engraving as a CIU subject to 433.17 might be inappropriate. The City is required to determine whether Coast Engraving is an existing electroplating facility or a new metal finishing facility and apply the applicable categorical standards in the revised permit.

During the site visit to Babbit Bearing Company, the auditors noticed that a tin casting operation was not documented in any of the previous City inspection reports or permits. That operation could be subject to the federal regulations listed at 40 CFR Part 471 if metal forming is associated with the procedures implemented for the products produced. Because of the time constraints, the possible tin casting operation was not reviewed as a component of the site visit. Therefore, the City is required to evaluate the tin casting operations at Babbit Bearing Company to determine if the facility should also be subject to 40 CFR Part 471. In addition, the City is required to revise Babbit Bearing Company's permit accordingly.

The Tetra Tech auditors were not able to determine whether the City correctly classified Jennings Technology Corporation as an existing metal finisher subject to 40 CFR 433.15. The files reviewed do not contain the necessary historical information for the auditors to make the determination, and City personnel were
unsure about when the facility began its metal finishing process operations. The City is required to have adequate documentation of its categorical determinations such that an oversight authority can review them. The auditors strongly recommend that the City document such information in each SIU file, such as in a fact sheet.

Mohawk Packing's permit states that the facility is subject to the categorical standards of 40 CFR 432.8 subpart H; however, no such categorical standards exist. Because the facility is a ham processor, the auditors assume that the City intended to regulate the facility under 40 CFR 432.80. Therefore, the City is required to revise Mohawk Packing's permit to reflect the facility's correct classification. Furthermore, because no pretreatment regulations are listed in 40 CFR 432.80, the City can classify the facility as a noncategorical SIU rather than a CIU.

9. Compliance Monitoring

The federal pretreatment regulations at 40 CFR 403.8(f)(2)(v) require that a POTW develop and implement an inspection and monitoring program to determine, independent of information supplied by nondomestic users, compliance or noncompliance with applicable pretreatment standards and requirements. Furthermore, 40 CFR 403.8(f)(2)(vii) requires POTWs to investigate instances of noncompliance and enforce the regulations as necessary.

9.1 Compliance Sampling

The regulations at 40 CFR 403.8(f)(2)(v) require that all SIUs be sampled at least once a year unless the POTW has authorized a CIU to forego sampling of a pollutant regulated by federal pretreatment requirements. In such a case, the POTW must sample for the waived pollutant(s) at least once during the permit term [40 CFR 403.8(f)(2)(v)(A)].

The auditors found the City's minimum compliance monitoring frequencies to be adequate. The City revised its compliance sampling frequency requirements in 2008. Before the revision, the City's compliance sampling frequency was dependent on the SIU's classification. The revised compliance sampling frequency is based on the type of discharges made by the user.
The table below describes the City's minimum compliance monitoring frequencies and the minimum self-monitoring frequency requirements.

<table>
<thead>
<tr>
<th>Discharge type</th>
<th>City compliance monitoring frequency</th>
<th>SIU self-monitoring frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent</td>
<td>2 per year</td>
<td>2 per year</td>
</tr>
<tr>
<td>Variable*</td>
<td>4 times per year</td>
<td>4 times per year</td>
</tr>
<tr>
<td>Extremely Variable</td>
<td>12 times per year</td>
<td>12 times per year</td>
</tr>
</tbody>
</table>

*A variable discharger is a user that discharges more than 5,000 gpd; its processes produce discharges that change over time or days; its treatment of wastewater does not include ion exchange, membrane or ultrafiltration, or batch discharge; and it might treat concentrated baths.

Even though the City's compliance monitoring frequencies are adequate, the auditors found some deficiencies with the City's compliance monitoring protocols. The auditors could not find any cyanide compliance monitoring during the second half of 2008 or any for 2009 at Jennings Technology Corporation sampling point 002. The facility is subject to the categorical standards at both 40 CFR Parts 433 and 468. At sampling point 002, the facility is required to conduct self-monitoring for cyanide to evaluate compliance with the 40 CFR 433.15 limit for cyanide. Therefore, the City is required to conduct compliance monitoring for cyanide at sampling point 002 to comply with the pretreatment program implementation requirements listed at 40 CFR 403.8(f)(2)(v). The City is reminded that failure to conduct compliance sampling as outlined by the City's approved pretreatment program could cause the City to be in noncompliance with pretreatment implementation requirements.

### 9.2 Compliance Inspections

The regulations at 40 CFR 403.8(f)(2)(v) require that all SIUs be inspected at least once a year, unless a discharger is subject to the reduced reporting requirements under 40 CFR 403.12(e)(3). In such a case, the POTW must inspect the discharger at least once every 2 years [40 CFR 403.8(f)(2)(v)(C)].

The auditors found the City's established compliance inspection frequency to be adequate. The City revised its compliance inspection frequency requirements in 2008. Before the revision, the City's compliance inspection frequency was dependent on the classification of the SIU. The revised compliance inspection frequency is based on the type of discharges made by the user. The table below describes the City's minimum compliance inspection frequencies.

<table>
<thead>
<tr>
<th>Discharge type</th>
<th>City compliance inspection frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent</td>
<td>2 per year</td>
</tr>
<tr>
<td>Variable*</td>
<td>4 times per year</td>
</tr>
<tr>
<td>Extremely Variable</td>
<td>4 times per year</td>
</tr>
</tbody>
</table>

*A variable discharger is a user that discharges more than 5,000 gpd; its processes produce discharges that change over time or days; its treatment of wastewater does not include ion exchange, membrane or ultrafiltration, or batch discharge; and it might treat concentrated baths.

City personnel also indicated that they have six different types of inspections. These consist of the following:
• Permit inspections: Performed during permit renewals or permit amendments.
• Compliance inspections: Performed to determine routine compliance status and to identify practices that might lead to noncompliance. Compliance inspections are normally not scheduled and are as in depth as the permit or annual inspection.
• Annual inspections: Performed once a year and are similar to compliance inspections but are more detailed.
• Compliance inspection with enforcement: Performed when an enforcement action is needed at a facility.
• Sampling inspection: Performed during routine sampling events. These inspections include only the facility's treatment process areas and pH monitoring areas.
• Spill and emergency inspections: Performed as-needed.
• Closure inspection: Performed before cancelling a permit and to ensure that the facility is closed.

Even though the City's established inspection frequency is adequate, the audit team could not find documented and complete pretreatment inspection reports for Univar USA, Inc., and SVTC Technology. The inspection reports provided to the audit team for Univar USA consist of stormwater inspections only, and the inspection reports for SVTC Technology focus on the pretreatment area only. The minimum federal requirements at 40 CFR 403.8(f)(2)(v) require the City to conduct at least an annual pretreatment inspection of all SIUs. Because the City has established a more frequent compliance inspection frequency than the minimum federal requirements, the City is required to implement its pretreatment program as established. These annual inspections should include a complete walk-through of an SIU's facility, including its process lines, chemical and hazardous-waste storage areas, pretreatment facilities, and spill-prevention procedures. Therefore, the City is required to ensure that it inspects all SIUs at the frequency established by the City's approved pretreatment program and that the City adequately document those inspections.

In addition, the audit team found several deficiencies with the City's inspection procedures. The audit team found that inspection procedures would greatly vary between the different inspectors. The inspection procedures at Coast Engraving provide an example of the variability. The facility's discharge of process wastewater was discovered only after a rotation of City inspectors. During the site visit, the facility representative indicated that the discharge of process wastewater had been occurring since the early 1980s and that the procedure had not been changed, so the facility representative was surprised that the City was in the process of changing its classification from a zero-discharger to a discharging CIU. Another example is the inconsistency in the documentation of notes in the field inspection reports. Some of the reports reviewed contain very detailed site visit observations and concerns, while the majority of the field inspection reports reviewed do not contain any notes regarding the facility's
process operation, wastestreams discharged to the City, any significant changes in process or flow or lack thereof, any unusual conditions, or chemical storage evaluations.

During the opening interview, City personnel indicated that the entire inspection staff attended training sessions on how to conduct inspections in 2007. City personnel indicated that the course had modules on pre-inspection preparations, inspection procedures, evaluating process wastestreams, characterizing wastestreams, and pretreatment facility evaluation. The City should evaluate those modules to ensure that they emphasize the importance of thorough documentation, and the City should offer periodic training for inspectors to ensure that they are aware of the documentation requirements.

Finally, during the site visits, the audit team noticed that the City inspectors routinely sign in at the facilities they are inspecting. The City should be aware that, by signing in at some facilities, the inspectors are agreeing that they will not report or document anything seen during the site visit. Therefore, City inspectors should determine, before signing in, whether it would preclude them from reporting what they see during the inspection.

9.3 Nondomestic User Site Inspections Conducted during the Audit

The audit team, along with City personnel, inspected 19 of the permitted and 1 nonpermitted nondomestic users as part of the PCA. The dischargers were selected to represent facilities of varying size and classification. The audit team noted the following during the nondomestic user site visits:

- **Advance Surface Finishing.** The facility is a metal finisher specializing in coating of rigid and flexible printed circuit boards. The company provides the following surfaces: hard gold, soft bondable gold, nickel sulfamate, electroless nickel immersion gold, immersion silver, and immersion white tin. The facility discharges treated rinse waters from the nickel-plating operations, as well as ion exchange regenerate.

The facility representative stated that its pretreatment system operates in a batch mode. The pretreatment system consists of a package treatment system (originally designed to treat a continuous effluent flow), which has been modified to provide batch treatment. On the basis of information noted by the audit team during the site visit, the pretreatment system is not being operated as a true batch treatment process. The facility representative stated that minimal amounts of wastewaters are treated daily, and the facility discharges only small volumes from the treatment process daily. The facility does not maintain documentation to confirm that each discharge has been fully treated before its discharge. The audit team could not determine if all untreated wastewaters sent to the facility's pretreatment system receive actual treatment or if it just displaces previously retained wastewaters. Such a type of treatment process could be using dilution to meet effluent limits.
The audit team reminds the City that a typical batch treatment operation batch-treats the complete volume of retained wastewater before it is discharged. The treated wastewaters are tested for compliance, and then the complete volume of treated wastewater is discharged. The City is required to thoroughly evaluate the treatment process with the operations manager to ensure that dilution is not being used.

The operations log, as explained by the facility representative, does not provide adequate operational data to confirm how much wastewater is generated in a day, how wastewater is being properly treated on that day, if the wastewater is stored for an additional period, or what the actual discharge volume was on a day. The City should require the facility to develop a batch discharge log to clearly document volumes of wastewaters generated, treated, or discharged daily.

Wastewater pipes conveying industrial flows were not labeled. The audit team recommends that the facility properly label wastewater pipes so that industrial flows can be properly identified.

The volume of the pH alarm was very low, and the audit team could barely hear it. The alarm was set for 6.5 and 10.5 standard units. The audit team recommends that the facility increase the volume of the audible alarm used to indicate pH values approaching effluent limits.

The facility did not have any cleaning documentation or calibration records to document proper maintenance of the pH probe. In addition, the buffer solutions used for calibration had exceeded their expiration date. Because the facility is required to maintain and operate a continuous pH recorder, the facility must implement procedures to ensure that the pH probe is in proper working condition. The City should require the facility to implement a pH logging system to document pH probe cleaning, calibration, and general maintenance. The log should contain pH values, dates, times, and documentation of the person performing the tasks.

- **Allergen, Inc.** The facility produces raw *Clostridium botulinum* for the botox industry. The facility's manufactured product is regulated by agencies such as the Centers for Disease Control and Prevention, Food and Drug Administration, and Federal Bureau of Investigation because it could be used as a biological weapon. For that reason, the facility representatives would not grant the EPA contractor access to the production area. The facility's production area also houses the facility's wastewater pretreatment operations, and therefore those areas were not reviewed during the site visit. The City inspectors explained to the facility representatives that not allowing the EPA contractor access to the areas would be considered a denial of entry, and they reviewed the Power to Inspect stipulation in Part E of the facility's permit with the facility.
representatives. The EPA contractor also formally reviewed the issue with the facility representatives but was still denied entry.

The City inspectors explained to the facility representatives that they would most likely issue the facility a notice of violation (NOV) letter for denying entry into the facility's production area. The City issued the facility an NOV letter on November 13, 2009, for not allowing the EPA contractor access to the production area. The facility was required to respond to the NOV letter explaining the cause of the violation, remedies taken for the violation, and future steps it will implement to ensure consistent compliance in the future with federal, state, and local regulations.

The facility responded to the NOV letter on December 1, 2009. The audit team's review of the facility's NOV response reveals an inaccurate account of the events during the site visit. Specifically, the second-to-last paragraph in the NOV response letter states, "had the EPA contracted employee provided the information required to confirm his status with the Agency he would have been provided access." That statement is incorrect. The EPA contractor provided the EPA contractor credential badge to multiple facility representatives for their review, therefore confirming his status with the Agency and providing the permit-required identification for the purpose of inspection.

- **ALSCO.** The facility is an industrial laundry providing uniform, linen, mop, and rug cleaning services to hotels, restaurants, and bars.

The site visit revealed several deficiencies with the facility's storage procedures. For example, the auditors noted that a waste oil drum in the chemical storage area was not labeled. The facility is required by law to label the waste oil as hazardous waste.

In addition, a 20-cubic-yard bin used to store some of the waste FOG was removed from the pretreatment system. The bin had a small leak and was leaking waste FOG to the ground along the facility's rear perimeter fence. The facility is required to take immediate action to eliminate the leak from the FOG waste bin.

The facility did not have any cleaning or calibration records to document proper maintenance of the pH probe. Because the City requires the facility to have a continuous pH recorder, the facility is required to maintain and operate a continuous pH recorder and to implement all procedures to ensure that the pH probe is in proper working condition. The City should require the facility to implement a pH logging system to document pH probe cleaning, calibration, and general maintenance. The log should contain pH values, dates, times, and documentation of the person performing the tasks.
The bulk chemical storage and cleaning solution area does not have secondary containment; however, the facility representatives stated that the tanks are double-walled. An inspection of this area also showed that the tank hose taps do not have permanent spill trays, and a garden-type hose that appeared to be used for cleanup (by hosing the area down) was observed. The facility is required to remove the garden hose from the bulk chemical and solution storage area and implement a dry cleanup standard operating procedure.

The facility has a water softener system designed to treat up to 131,600 gpd. The facility representatives stated that the water softener system does not have to be regenerated, and the water softener system produces no discharge to the sewer system. The facility is required to evaluate and provide the maintenance requirements (i.e., regeneration protocols) for the water softener system.

- APCT, Inc. The facility manufactures multilayer, single-sided, rigid printed circuit boards and conducts copper, tin lead, and gold plating and etching operations.

APCT is using dilution as a substitution for treatment. The auditor questioned the facility representative about the facility’s volume of wastewater flow (approximately 80,000 gpd). The facility representative stated that they constantly run their rinse waters (which flow to the metal-bearing wastewater sump) because the pretreatment system cannot treat high concentrations of chemicals. Prohibited Substances in Part E of the facility’s permit requires the facility to abide by Santa Clara City Code Chapter 13.10. Santa Clara City Code Chapter 13.10.320 prohibits, “the use of diluting waters as a partial or complete substitute (1) for adequate treatment, (2) to achieve compliance, or (3) to meet local limitations for wastewater.” The City is required to evaluate the facility’s wastewater flow and rinse water operations and to ensure that the facility’s pretreatment system is adequately designed to handle chemical concentrations without the use of dilution.

During the site visit, the facility representative was confused as to where the correct sampling point for cyanide was. The facility representative questioned the auditor and the City inspector about where cyanide wastewater samples should be collected. The facility representative stated that other regulatory agencies had recently inspected the facility. Those agencies might have provided comment and input regarding the facility’s gold plating process, which incorporates cyanide, thus causing some confusion about the correct cyanide sampling location. On the basis of the discussion and observations of the gold plating process, it appears that the facility has been taking the cyanide sample from the correct location. Even through the facility’s cyanide sampling location is correct, the auditor strongly recommends that the City review with the facility representative
the cyanide wastewater process and sample collection location to ensure that the representative understands the collection location. The collection location should also be noted on the map associated with the facility's fact sheet. The audit team also recommends that the City's industrial pretreatment program personnel have a detailed discussion with the facility representatives concerning regulatory authority for determining compliance with discharges to the sewer system (i.e., wastewater sample locations). The facility representatives should not be modifying operations that affect the quality of wastewaters discharged to the sewer system without properly notifying the City.

The facility representative was not knowledgeable of the types of products that are rinsed and cleaned in the general rinse area adjacent to the pretreatment area. The auditor questioned the facility representative about what parts are rinsed in the general rinse area. The facility representative stated that he "never knows what is being rinsed." Wastewater from the general rinse area flows to the metal-bearing wastestream sump to be treated. The auditor recommends that the facility develop a standard for what items are appropriate to be rinsed in the general rinse area so the facility is aware of what wastestreams are flowing to its pretreatment system and so that noncategorical wastestreams are not being discharged with the categorical wastestreams.

The containment area did not appear to be large enough to contain the contents of the drums. The chemical storage area was filled with twenty-one 55-gallon drums of stored chemicals. The drums are contained within a 2-and-a-half-inch secondary containment berm. The containment area has a floor drain, which, according to the facility representative, drains to a dead sump in the facility. The auditor recommends that the City discuss other means of chemical storage to ensure that chemicals are adequately contained.

- **Babbitt Bearing Company.** The facility is a job shop with casting, machining, and metal-plating operations. The company provides services to clients ranging from the aerospace industry to wastewater treatment operations. The facility is classified as a zero-discharger operating under 40 CFR Part 413.

The plating area has a stripper tank used to remove chrome from off-spec products. This tank was labeled for the raw chemical tetrapotassium pyrophosphate, which is used in the stripping process and stated to be Non RCRA (not for the quality of the actual working solution, which would contain chromium). The fact that the virgin stripper solution, tetrapotassium pyrophosphate, is not RCRA does not mean that the contaminated stripper solution is Non RCRA. The City is required to ensure that the facility properly labels and manages process tanks.
• **Clean Harbors.** The facility is a centralized waste treatment facility subject to 40 CFR Part 437, subpart A. The facility accepts hazardous waste, and tanker or drum waste. All wastes are profiled before acceptance. The facility representative indicated that only the wastes from the tankers are treated on-site. All other wastes are sent off-site for disposal.

The facility representative indicated that some of the drummed acid and alkaline wastes are stabilized on-site and then repackaged for off-site disposal or additional off-site treatment. When asked, the City inspectors were unsure as to whether a flow balance had ever been conducted to ensure that the acids and alkaline wastes that the facility stabilizes are not discharged to the City. Because the facility is not permitted to discharge such wastes to the City, the City is required to ensure that the wastes are properly disposed of and not discharged to the City.

• **Coast Engraving, Inc.** The facility is permitted as a zero-discharge CIU subject to 40 CFR Part 413 Subparts A-H, but during the site visit, the auditor noted that facility actually is a discharging job shop metal finisher that should most likely be classified as a CIU subject to 40 CFR 413.64. The City permitted the facility as a zero-discharger in 2008, performed inspections, and collected manifests indicating the quantities of waste hauled away. The City has never performed a water balance at this facility. A City inspector noticed on August 18, 2009, that the facility was actually discharging regulated and unregulated process wastewater from its various operations and ordered it to stop discharging. The City’s attorney is considering enforcement options.

At the time of the site visit, the facility was discharging only domestic wastewater to the collection system, because the City ordered the facility to stop discharging all process wastewaters. Before it ceased discharging process wastewater in August 2009, the facility was discharging an unknown amount of unregulated process wastewater from the screen printing process and approximately 1,200 gallons per month of process wastewater from a metal finishing operation.

The fabric screen printing process includes applying an emulsion solution to set the image. Before the City ordered the facility to stop discharging process wastewater, the emulsion solution was hand-rinsed off screens into a sink that drains directly to the collection system. During the site visit, the facility was collecting the emulsion rinse water in 5-gallon buckets and manually adding it to the pretreatment system.

In addition to the emulsion solution, the facility was also discharging treated gum solution, caustic solution (about 3 gallons every 2 months), and nitric acid baths (discharged once a week) from its printed film processing line to the City. The facility representatives stated that the process has been in place for more than 20 years. Because the City has
ordered the facility to stop discharging, the facility has been collecting its wastewater and having it hauled off.

When the facility was discharging process wastewater, rinse waters from the screen printing process were discharged directly to the collection system without treatment. Wastewaters generated from the metal finishing process were collected, treated with a flocculant, and then filtered to remove the sludge. The filtrate was discharged to the collection system. Occasionally, the facility tested the discharge with pH strips (but does not adjust the pH of the wastewater) before discharging.

During the site visit, about a dozen, mostly uncovered barrels and buckets were in the wastewater treatment area filled with several hundred gallons of untreated wastewater. The auditors observed that areas of the floor were wet, and there were several large puddles. Facility representatives reported that the company that hauls off the treated wastewater had not come by as scheduled, so the untreated wastewater (the facility cannot use the treatment system because the 1,200-gallon final holding tank is full) has been manually diverted into the temporary containers. The auditors requested that the facility store the untreated wastewater in appropriate containers and properly contain them. The facility representative agreed to order drums to store excess wastewater. In addition, the auditors requested that the facility properly contain the uncontained bottles of solvent and that the facility label all containers.

The facility’s sampling methods are insufficient. Grab samples are taken from the large holding tank, but the wastewater is not agitated, so the samples are not representative. The auditors reviewed the facility’s sample results on-site and noticed that the metals were analyzed using a 6000 series method and mercury by method 7470, which are not approved methods for wastewater samples. The City inspectors and the auditor reminded the facility representative to ensure that sampling and analysis are conducted using approved methods. Furthermore, the City should conduct a follow-up inspection to ensure that the facility is using appropriate sampling methods during its sample collection.

The City is required to follow up with the facility to ensure that it is properly permitted as a discharging CIU. Furthermore, the City is required to ensure that the facility is adequately treating and storing its process wastewater and chemicals.

• **HED Battery Corporation.** The facility manufactures non-aqueous lithium batteries. The facility does not generate industrial wastestreams; therefore, it does not discharge any industrial wastewater to the POTW. The facility is permitted as a zero-discharger. The facility representatives stated that the company will close in March 2010.
During the site visit, both of the facility representatives stated that they had never seen a copy of the facility’s permit. The City inspector provided a copy of the permit to the facility representative. The City should ensure that all zero-discharge permittees receive copies of their permits.

- **Jennings Technology Corporation.** Jennings manufactures high-voltage, electronic components such as radio frequency relays, capacitor relays, and interruption switches for radio, aircraft, communications, and radar uses. The facility has two main production buildings. It is a CIU subject to 40 CFR 433.15 and 468.14.

During the visit, the auditor noted several areas of concern. The City inspector asked the facility representative to ensure that the makeup rinse water for the cyanide line was being added only in appropriate amounts (i.e., not constantly running) while the line was being used, to prevent dilution of the wastestream. In addition, the auditor and the City inspectors noted that a sink is in the spray painting area that is plumbed to the sanitary sewer line. The City inspectors asked the facility to remove or plug the sink (which had a dripping faucet), to ensure that process wastestreams are not being discharged via the sanitary sewer connection. Furthermore, auditor and the City inspectors noticed that one barrel of nonhazardous waste (as reported by facility representatives) was not properly labeled. The inspectors requested that the facility determine and properly label the contents of the unlabeled barrel. And finally, a substantial amount of foam was in the main sampling area. The facility representative indicated that it was an unusual situation and could not explain how it occurred. The inspectors requested that the facility investigate the cause of the foam. The Tetra Tech inspectors strongly recommend that the City follow up with the facility to ensure that all the deficiencies noted during the inspection are corrected. Therefore, the City should conduct a follow-up visit with Jennings Technology to ensure that all the areas of concern observed during this site visit are corrected or resolved.

- **Kearney Pattern Works and Foundry.** The facility is a foundry that manufactures various aluminum products for a variety of clients. The facility reported no generation of wastewater from its operations and no discharge of nondomestic wastestreams to the POTW.

Even though the City permits this facility as a zero-discharger, the auditor identified a deburring/tumbling operation in the maintenance room that discharges to the City sanitary sewer. The City is required to formally evaluate the deburring/tumbler operations and ensure that all discharges are properly permitted and monitored.

The auditor also noticed two 55-gallon drums of motor oil stored in an area of heavy traffic and not contained in secondary containment. The drums
were adjacent to the service path between the molding prep, pouring, cooling, and inspection area and the grinding area. The City is required to ensure that the facility properly manages and stores the motor oils.

- **Micrel.** The facility manufactures semiconductors. The facility plans to expand its dry operations over the 2009 Christmas break. The facility representatives stated that the modifications will not increase the process flows; however, they did not state that the characteristics of the wastestreams would stay the same. The audit team recommends that the City request the facility to give a formal submittal of the proposed changes before the Christmas break.

The facility has recently modified its pretreatment system in an effort to eliminate pH exceedances. The facility's technical support staff had identified problems with chemical delivery to the neutralization system because of blockages in delivery lines. Each of the three pH neutralization tanks now has its own pH meter, chemical addition system, and tank mixer. The audit team recommends that the City request a timeline for the facility to formally modify its pretreatment system's standard operating procedures.

The auditor could not determine how and where the wastewater from cleaning the air scrubber filter is discharged into the pretreatment system. The effluent was reddish-pink the entire time the audit team was at the pretreatment system; however, the pump station to the pretreatment system was not pinkish when inspected. Representatives stated that they were in the process of cleaning air scrubber filters, and the cleaning solution used is reddish in color. The solution contained hydrofluoric and phosphoric acids. The City is required to confirm that there is no short-circuiting of the pretreatment system and that the pretreatment system is properly designed to treat the air scrubber cleaning wastes.

The facility does not have the ability to shut down or divert flows to holding tanks if the pH of the wastewater drops below the permitted limit of 6.5 standard units (s.u.). The facility has pH alarms on the final two neutralization tanks and the final effluent. The alarms are set for a pH value of 6.5 s.u. The alarm system pages the maintenance staff if the pH of the effluent drops below 6.5 s.u. The City should evaluate whether the pH alarm set point of 6.5 s.u. is adequate to ensure that effluent will remain in compliance during peak flows.

The auditor noted a temporary rubber hose connecting the sump in the pretreatment area to the effluent flume. The pretreatment system containment area had a spill sensor positioned approximately 8 inches off the floor. The exact volume of liquid in the containment area needed to activate the sensor was not discussed; however, if the sump is in active mode because of the rubber hose connected to the effluent flume, any
spills would be pumped directly to the sewer without treatment. The audit team informed the facility representatives that this hose was bypassing the treatment and should be removed immediately; the hose was removed at that time. The City is required to evaluate the discharge location of the sump within the pretreatment secondary containment area, specifically addressing why the sump was discharging to the effluent flume during the site visit, and the City should document what corrective actions have been implemented to ensure that bypassing will not reoccur.

• **Mohawk Packing.** Mohawk is a meat packaging facility that processes beef and pork into corned beef and smoked bacon, respectively, for various commercial entities. Production of corned beef is seasonal, with production in the high season (July through March) peaking at around 80,000 pounds per day, while the low season averages about 35,000 pounds of beef processed each day. The production of bacon remains fairly constant around 350,000 pounds per week.

The auditor noticed that the boiler chemicals are stored in a drum in the boiler room and are not secondarily contained (a floor drain is in the room). Cooling tower chemicals are stored outside, and some of those barrels are under a roofed area that is secondarily contained. Newly delivered chemicals that were stored outside, however, were uncovered and not contained. Therefore, the auditor recommends that the City inform the discharger of the secondary containment requirements of all chemicals, and the City should conduct a follow-up inspection to ensure that the facility is properly storing all chemicals.

• **Prudential Overall Supply.** This facility is an industrial laundry. The facility runs 2 lines: a clean line and a dirty line. The clean line is for cover gowns from clean room industrial facilities. The dirty line is for the more typical industrial laundry materials such as shop towels, uniforms, and floor mats. The facility also washes a small amount of linens.

During the site visit, the auditor noticed that the temperature inside the sampler was reading at 60 degrees Fahrenheit (°F) (15.5 degrees Celsius [°C]), which is noncompliant with the sampling requirements of 40 CFR Part 136. According to 40 CFR Part 136, samples must be kept at less than 6 °C, but above 0 °C. Therefore, the City is required to conduct a follow-up inspection at the facility to ensure that the facility's sampler is operating within the temperature requirements of 40 CFR Part 136.

In addition, the auditor noted a hand washing sink in the chemical storage area. The audit team recommends that the City require the facility to place a sign above the sink to warn against dumping any spent or unused chemicals down the drain. In addition, the audit team recommends that the City require the facility to conduct periodic training for employees on the proper chemical handling and disposal practices.
• **Solexel.** The facility is a manufacturer and research and development facility for solar panels. A site visit was conducted at this facility because Amptech (a CIU subject to 40 CFR Parts 433A and 469A) used to lease a portion of Solexel's office space. Amptech has since closed, and Solexel is moving back into the space. Before Amptech’s closing, both facilities shared an acid neutralization system and one common outfall. Each facility, however, had its own discharge permit. The City inspector indicated that, when Amptech was in operation, Solexel was not discharging any process wastewater.

During the site visit, Solexel was in the process of remodeling the old Amptech facility. The facility representative indicated that he was unsure as to whether the newly acquired space would be large enough to handle all the additional equipment. The representative added that a bigger facility might be needed.

No deficiencies were noted during the site visit. No additional action is required.

• **Solo Power, Inc.** The facility manufactures copper indium gallium selenium solar cells. The manufacturing of the cells includes an electroplating process. The facility does not discharge industrial wastestreams to the POTW. All industrial wastestreams from the electroplating process are collected and hauled off-site for disposal.

The auditor discussed permanently capping or plugging the facility’s severed connection to the City’s POTW system to ensure that discharges have been eliminated. The auditor recommends that the City follow up with facility to ensure that the facility has adequately capped or plugged its industrial wastewater connection to the City’s POTW.

• **SVTC Technologies, LLC.** The facility provides full-scale development foundries for customers to develop their own semiconductor manufacturing processes and procedures. The facility is permitted as a noncategorical SIU under research and development of semiconductors.

Facility representatives stated that the company was evaluating the possibility of expanding the services and fabrication tools available to clients. The City is required to formally review current and possible future operations to ensure that the facility's operations do not fall under 40 CFR Part 469 for the manufacturing of semiconductors.

• **T. Marzetti Company (West).** The facility manufactures various food products for Jack-in-the Box, Taco Bell, Wendy’s, and Applebee’s. Products include a variety of salsas, dressings, dips, Wendy’s mix-in Frosty products, and Jack-in-the Box's chocolate shake mixture. The
facility has 12 process lines, but operates only 8–9 of them. The processing lines are dependent on product being manufactured. The basic process is the same for each line, but variations include the size of package and whether any of the materials need to be heated in the kettle.

All process wastewater goes to pit outside the facility and then is pumped through a roto screener and distributed among four equalization tanks (25,000 gallons each). The tanks are filled to approximately the 17,000-gallon level. The tanks are simultaneously drained to a mixing tank for polymer addition and coagulation/flocculation. Wastewater is then pumped to a dissolved air flotation (DAF) unit. The sludge collected in DAF is pumped to a storage tank and then sent to East Bay Municipal Utility District. Clean water from the DAF goes through pH adjustment, final flow monitoring, and then to the City sewer.

During the site visit, the auditor noticed that the temperature inside the sampler was at 48 °F (or 8.9 °C), which is noncompliant with the sampling requirements of 40 CFR Part 136. According to 40 CFR Part 136, samples must be kept at less than 6 °C, but above 0 °C. Therefore, the City is required to conduct a follow-up inspection at the facility to ensure that the facility's sampler is operating within the temperature requirements of 40 CFR Part 136.

- **THAT Corporation.** The facility manufactures semiconductor chips for audio equipment.

The facility representative was unaware of how the water softener is maintained or where the brine regenerate water is disposed of. The audit team recommends that the City follow up with the facility to review the facility's water softener regeneration operation and discharge location.

- **Univar USA, Inc.** This facility is reported to be a specialized provider of chemicals. This facility received only a drive-by inspection because the auditor noticed the facility while conducting a site visit at a neighboring facility. On the basis of verbal discussions with City staff, the facility does not discharge nondomestic wastewaters to the POTW. City personnel stated that the facility did not require an industrial user permit on the basis of its operations.

The auditor observed approximately five bulk delivery tanker trailers adjacent to the facility. On the basis of the field observations, the auditor requested the City to provide inspection reports documenting the facility's operations and the status of nondomestic discharges and chemical management in the facility. The audit team received three inspection reports that focus on stormwater management issues and not on any of the facility processes. The reports do not evaluate or present
documentation confirming that nondomestic wastewaters or the storage of bulk chemicals meets the requirements in the City's SUO.

A review of the company's services (as available on the Internet) showed that the facility provides specialized services that include blending and repackaging of chemicals. The available information states that the company provides waste management services that include the transportation and warehousing of hazardous materials. No information was available to the auditor on what activities are ongoing at the facility in San Jose. The auditors required the City to ensure that it has correctly classified [40 CFR 403.8(f)(2)] the facility.

On November 3, 2009, the City conducted a follow-up inspection to determine whether or not industrial wastewater is discharged by the facility. According the City's inspection report, the City inspectors confirmed that the facility discharges only domestic wastewater and that the facility does not wash any drums, totes, or containers on site. Therefore, no additional action is required.

- **Xstrata Recycling, Inc.** The facility is a recycling operation that processes electronic scrap materials to capture their precious metals. The facility does not discharge industrial wastestreams to the POTW. All industrial wastestreams are collected and hauled off-site for disposal. The facility is permitted as a zero-discharger.

During the site visit, there were no discussions about wet scrubbers, which are commonly used in processes such as those in operation at the facility. The facility representative stated that particles for the furnace process are collected in a bag-house. The auditor recommends that the City determine if the facility uses any wet scrubbers in any of its processes. If the facility does use wet scrubbers, the City should also discuss disposal practices for the wastewater generated from the wet scrubber.

**9.4 Requesting, Receiving, and Analyzing Reports**

The federal pretreatment regulations at 40 CFR 403.8(f)(2)(iv) require the City to request, receive, and analyze all reports submitted by SIUs. The SIU reports must contain the information required at 40 CFR 403.12. The audit team reminds the City that via the pretreatment streamlining provisions, EPA has finalized the sampling requirements for all periodic reports required at 40 CFR 403.12(e) and (h). The City is required to ensure that all reports submitted by SIUs comply with the provisions of 40 CFR 403.12.

The file reviews revealed several violations that City personnel failed to identify. Several of Mohawk Plating’s and Prudential Overall Supply’s self-monitoring reports indicate that the pH holding times of their self-monitoring samples were exceeded. The analytical requirements at 40 CFR Part 136 specify that the maximum pH holding time is not to exceed 15 minutes. Therefore, the City is
required to review all sampling reports to ensure that sample holding times are not exceeded.

Mohawk Packing’s file review revealed that the discharger violated its oil and grease limit during the City’s compliance monitoring (November 25, 2008). The City’s compliance sample result for oil and grease was 151 mg/L (the City’s limit for oil and grease is 150 mg/L). The auditors could not find any documented enforcement regarding the violation. Therefore, the City is required to ensure that all instances of effluent limit exceedances are adequately documented in the permit files.

Clean Harbors’ file review revealed that the discharger is using the wrong analytical method for analyzing titanium. The discharger’s self-monitoring reports indicate that method 200.7 is being used rather than methods 283.2 or 3111D. After the audit, City personnel informed the facility that its method used for analyzing titanium is noncompliant with the requirements listed at 40 CFR Part 136. In a letter dated November 4, 2009, Clean Harbors responded to the City indicating that it found an EPA memo, dated November 7, 2007, that amended the list of approved methods for titanium to include methods 200.7 and 200.8. Even though Clean Harbors’ titanium analytical method was found to be adequate, the City should have had noticed that the method used was not consistent with the published guidelines in 40 CFR Part 136 before this audit. Therefore, the City is required to have procedures to ensure that all analyses used during SIU self-monitoring events are in compliance with the regulations set forth at 40 CFR Part 136.

The chain-of-custody (COC) reports submitted by Mohawk Packing and Jennings Technology do not specify the type of samples taken. The City requires its SIUs to submit all COC reports as part of its required reporting. Because the City requires its SIUs to submit the COC reports, the City should evaluate the COC reports to ensure that the reports adequately document each sampling activity. Because Mohawk Packing and Jennings Technology’s COC reports do not specify what sample type was used, the City cannot assess whether the SIUs are in compliance with their permit requirements for sample type. Therefore, the City is required to review all SIU self-monitoring reports to ensure that the correct sample type was used during the self-monitoring event.

9.5 Slug Discharge Control Plans

The federal pretreatment regulations at 40 CFR 403.8(f)(2)(vi) require the City to evaluate each SIU, by October 14, 2006, or within 1 year of a facility becoming an SIU, to determine whether the SIU needs to develop and implement a slug discharge control plan. A slug discharge is any discharge of a nonroutine, episodic nature, including an accidental spill or noncustomary batch discharge [40 CFR 403.8(f)(2)(vi)]. The regulations also require an SIU to notify the POTW immediately of any changes at the SIU’s facility that affect the potential for a slug discharge.
During the interview, City personnel indicated that it performs the slug discharge evaluation of all SIUs during annual compliance inspections. The City performed slug discharge evaluations for all the files reviewed during the PCA.

City personnel indicated that only four of its SIUs were found to need to develop and implement a slug discharge control plan: Applied Materials Buildings 2 and 3; Headway Technologies; California Paperboard; and Ecolab, Inc. The site visits conducted during the PCA, however, revealed that several additional SIUs should be required to develop and implement a slug discharge control plan. For example, during the ALSCO site visit, the auditors noted that the emergency process schematic in the facility’s permit application states that wastewater discharges will bypass the pretreatment system and go directly to the sewer in emergency situations. On the basis of the volume and concentration of raw chemicals and cleaning solutions stored and used on-site, such a bypass of the pretreatment system would be a slug to the City.

In addition, during the site visit at Micrel, the auditors noticed a reddish color in the pretreatment system. The discoloration was from the cleaning chemicals the facility uses to clean the air scrubber filters. Because it is an occasional cleaning process, the auditor was uncertain if the chemicals used during the cleaning process are compatible with the facility’s pretreatment process. Also, at SVTC Technologies, the auditor noted that the wastewater treatment system is not able to treat wastes without power. The facility representatives stated that during power failures, chemical baths are discharged to the treatment system.

Therefore, the City is required to formally evaluate those facilities to determine if slug discharge control plans are needed.

10. Enforcement
40 CFR 403.8(f)(5) requires the City to develop and implement an ERP. This plan must contain detailed procedures indicating how the City will investigate and respond to instances of industrial user noncompliance.

City personnel indicated that the City revised its ERP in June 2009 and began implementing it in September 2009. As part of this PCA, the audit team reviewed the City’s revised ERP and enforcement actions. The following sections describe the audit team’s concerns.

10.1 Deficiencies with the ERP
The definition of significant noncompliance (SNC) in the City’s revised ERP is not consistent with the definition of SNC listed in the City’s SUO (Chapter 15.41, Sewer Use Regulations). The SNC definition in the ERP does not include the instantaneous limits clause in its description of chronic and technical review criteria violations. Therefore, the City is required to revise its definition of SNC in the ERP so it is consistent with the SUO definition.
Table 5 of the City's ERP describes the enforcement actions for possible violations found during compliance inspections. The table includes a violation type of *Falsification-Bypassing Sample Point*. The title of the violation is not consistent with the federal definition of a bypass. The federal definition at 40 CFR 403.17a) states that a bypass is the intentional diversion of wastestreams from any portion of an industrial user's *treatment facility*, and not the bypass of an industrial user's sample point. Therefore, the City is required to revise its description of the violation to reflect the federal definition.

In addition, page 12 of the ERP (under the section, Duration of the violation) states that violations that continue over *prolonged periods* should subject the industrial user to escalated enforcement actions. The ERP, however, does not define the term prolonged periods. Therefore, the audit team strongly recommends that the City establishes a specific definition of prolonged periods so that the City can take consistent enforcement actions.

10.2 Failure to Take Appropriate Enforcement Actions

The City failed to take appropriate enforcement actions against Mohawk Plating for violating its oil and grease effluent limit. Mohawk Packing exceeded its oil and grease limit on November 26, 2008. The facility's file has no indication that the City recognized the violation or issued any enforcement to correct it. Therefore, the City must take enforcement action against Mohawk Packing for failure to comply with its discharge permit.

The City failed to take appropriate enforcement actions against Mohawk Plating and Prudential Overall Supply for exceeding the holding times of their pH samples. The audit team did not find any indications in the files that the City recognized these as sampling violations or issued any enforcement to correct them. Therefore, the City must take enforcement actions against Mohawk Plating and Prudential Overall Supply for failure to comply with sampling requirements.

The site visit to Kearney Pattern Works and Foundry revealed that the facility was in violation of its zero-discharge permit. The auditors noted that the facility is discharging wastewater from its deburring/tumbling process to the City. The City is required to take enforcement actions against Kearney Pattern Works and Foundry for violating its zero-discharge requirement.

Furthermore, Advance Surface Finishing’s file review revealed that the facility is discharging without a valid permit, which is in violation of the City’s SUO. Therefore, the City is required to take enforcement actions against Advance Surface Finishing for an unpermitted discharge.

11. Data Management

Even though the City has a sophisticated data management program consisting of both hard-copy files and electronic data, the audit team was unable to find adequate documentation in Coast Engraving’s file to evaluate the facility’s correct categorical classification. When requested, the City could not produce a
comprehensive permitting history for the facility. Because many years of documentation are missing, and the City's permitting history does not include some of the information offered by the facility representative (as stated during the site visit), the auditors strongly recommend that the City research the history of the facility and resolve the missing information that could not be found in the files. Furthermore, the auditors recommend that the City maintain a comprehensive history of all SIUs to ensure that the City's classification rationale can be validated.

With the exception of the missing information from Coast Engraving's files, the City's files are well organized and easy to review.

12. Pretreatment Program Outreach/Pollution Prevention/Environmental Effectiveness

In addition to the City's FOG and dental amalgam programs, the City has an extensive outreach and pollution prevention program that includes a pharmaceutical disposal program, a mercury thermometer exchange program, pollution-prevention events, and other community events and meetings. In 2008 the City collected over 1,695 pounds of unused medication and collected more than 775 mercury thermometers.

The City also conducts industrial user Academy Training sessions for its nondomestic users to educate the dischargers of the City's pretreatment program. Agenda items for the sessions consist of an overview of the San Jose/Santa Clara WPCP, the City's pretreatment program, the permit application process, the permit issuance process, permit conditions, self-monitoring reporting requirements, sampling procedures, enforcement procedures, and several other aspects of the pretreatment program.

13. Summary of Findings, Requirements, and Recommendations

Listed below are the primary requirements and recommendations resulting from the audit of the City's pretreatment program. For more specific information pertaining to each comment, see the cited sections of the report.

13.1 Requirements

1. The City's SUO does not specify the required federal certification statement [40 CFR 403.12(l)] that must be submitted with baseline monitoring reports, report on compliance with categorical pretreatment standard deadline, and periodic compliance reports. Therefore, the City is required to revise the SUO to include the required certification statement that must be submitted with reports. (Section 5.3, Reporting Requirements)

2. The City is not adequately characterizing its nondomestic dischargers. The City is required to ensure that it correctly classifies Coast
Engraving and issues it a correct permit as necessary. Furthermore, the City is required to formally evaluate the deburring/tumbling operation at Kearney Pattern Works and Foundry and ensure that the City adequately classifies, permits, and monitors all process wastewater discharges. (Section 6, Nondomestic User Characterization)

3. The file review revealed that Advanced Surface Finishing's permit expired on September 16, 2009. Therefore, the City is required to ensure that the Advance Surface Finishing is not discharging without a valid permit or the City should reissue Advance Surface Finishing a permit to ensure that the facility is not in violation of the City's SUO. (Section 7.1, Expired Permits)

4. The permits reviewed do not adequately require nondomestic users to report all significant changes. Therefore, the City is required to ensure that its requirement of notification of significant change also includes decreases in production and flow. (Section 7.2, Notification of Significant Change)

5. The PCA revealed several instances where the City is inappropriately applying pretreatment standards and requirements. The City is required to revise Clean Harbors' permit to include the correct list of applicable categorical effluent limits. In addition, the City is required to determine whether Coast Engraving is an existing electroplating facility or a new metal finishing facility and apply the applicable categorical standards in the revised permit. Furthermore, the City is required to evaluate the tin casting operations at Babbit Bearing Company to determine if the facility should also be subject to 40 CFR Part 471 and revise its permit accordingly. (Section 8, Application of Pretreatment Standards and Requirements)

6. The Jennings Technology Corporation files do not contain the necessary historical information for the auditors to make the determination whether the City correctly classified the facility, and City personnel were unsure about when the facility began its metal finishing process operations. The City is required to have adequate documentation of its categorical determinations such that an oversight authority can review them. The auditors strongly recommend that the City document such information in each SIU file, such as in a fact sheet. (Section 8, Application of Pretreatment Standards and Requirements)

7. Mohawk Packing's permit states that the facility is subject to the categorical standards of 40 CFR 432.8 subpart H; however, no such categorical standards exist. Therefore, the City is required to revise Mohawk Packing's permit to reflect the facility's correct classification. Furthermore, because no pretreatment regulations are listed in 40 CFR
432.80, the City can classify the facility as a noncategorical SIU rather than a CIU. (Section 8, Application of Pretreatment Standards and Requirements)

8. The auditors could not find any cyanide compliance monitoring during the second half of 2008 or any for 2009 at Jennings Technology Corporation sampling point 002. Therefore, the City is required to conduct compliance monitoring for cyanide at sampling point 002 to comply with the pretreatment program implementation requirements listed at 40 CFR 403.8(f)(2)(v). (Section 9.1, Compliance Sampling)

9. The audit team could not find documented and complete pretreatment inspection reports for Univar USA, Inc., and SVTC Technology. Because the City has established a more frequent compliance inspection frequency than the minimum federal requirements, the City is required to implement its pretreatment program as established. These annual inspections should include a complete walk-through of an SIU's facility, including its process lines, chemical and hazardous-waste storage areas, pretreatment facilities, and spill-prevention procedures. Therefore, the City is required to ensure that it inspects all SIUs at the frequency established by the City's approved pretreatment program and that the City adequately document those inspections. (Section 9.2, Compliance Inspections)

10. The site visit to Advance Surface Finishing revealed that the facility's pretreatment system might be using dilution to meet effluent limits. The City is required to thoroughly evaluate the treatment process with the operations manager to ensure that dilution is not being used. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

11. ALSCO's site visit revealed several deficiencies with the facility's storage procedures. The facility is required by law to label the waste oil as hazardous waste. The facility is required to take immediate action to eliminate the leak from the FOG waste bin. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

12. An inspection ALSCO's bulk chemical storage and cleaning solution area showed that the tank hose taps do not have permanent spill trays, and a garden-type hose that appeared to be used for cleanup (by hosing the area down) was observed. The facility is required to remove the garden hose from the bulk chemical and solution storage area and implement a dry cleanup standard operating procedure. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

13. ALSCO has a water softener system designed to treat up to 131,600 gpd. The facility is required to evaluate and provide the maintenance requirements (i.e., regeneration protocols) for the water softener
14. APCT is using dilution as a substitution for treatment. The City is required to evaluate the facility's wastewater flow and rinse water operations and to ensure that the facility's pretreatment system is adequately designed to handle chemical concentrations without the use of dilution. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

15. The site visit to Babbit Bearing Company revealed that the facility has mislabeled its process tanks. The City is required to ensure that the facility properly labels and manages process tanks. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

16. The Clean Harbor representative indicated that some of the drummed acid and alkaline wastes are stabilized on-site and then repackaged for off-site disposal or additional off-site treatment. Because the facility is not permitted to discharge such wastes to the City, the City is required to ensure that the wastes are properly disposed of and not discharged to the City. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

17. During the Coast Engraving site visit, about a dozen, mostly uncovered barrels and buckets were in the wastewater treatment area filled with several hundred gallons of untreated wastewater. The City is required to ensure that the facility is adequately treating and storing its process wastewater and chemicals. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

18. Even though the City permits Kearney Pattern Works and Foundry as a zero-discharger, the auditor identified a deburring/tumbling operation in the maintenance room that discharges to the City sanitary sewer. The City is required to formally evaluate the deburring/tumbler operations and ensure that all discharges are properly permitted and monitored. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

19. The auditor also noticed two 55-gallon drums of motor oil stored in an area of heavy traffic and not contained in secondary containment. The City is required to ensure that the facility properly manages and stores the motor oils. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

20. The auditor could not determine how and where the wastewater from cleaning Micel's air scrubber filter is discharged into the pretreatment system. The City is required to confirm that there is no short-circuiting of the pretreatment system and that the pretreatment system is
properly designed to treat the air scrubber cleaning wastes. The City is required to confirm that there is no short-circuiting of the pretreatment system and that the pretreatment system is properly designed to treat the air scrubber cleaning wastes. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

21. The auditor noted a temporary rubber hose connecting the sump in Micrel's pretreatment area to the effluent flume. The City is required to evaluate the discharge location of the sump within the pretreatment secondary containment area, specifically addressing why the sump was discharging to the effluent flume during the site visit, and the City should document what corrective actions have been implemented to ensure that bypassing will not reoccur. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

22. During the Prudential Overall Supply and T. Marzetti Company site visits, the auditor noticed that the temperature inside the sampler was noncompliant with the sampling requirements of 40 CFR Part 136. Therefore, the City is required to conduct a follow-up inspection at the facility to ensure that the facility's sampler is operating within the temperature requirements of 40 CFR Part 136. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

23. The SVTC Technologies representatives stated that the company was evaluating the possibility of expanding the services and fabrication tools available to clients. The City is required to formally review current and possible future operations to ensure that the facility's operations do not fall under 40 CFR Part 469 for the manufacturing of semiconductors. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

24. The file reviews revealed several violations that City personnel failed to identify. Therefore, the City is required to review all sampling reports to ensure that sample holding times are not exceeded. (Section 9.4, Requesting, Receiving, and Analyzing Reports)

25. Mohawk Packing's file review revealed that the discharger violated its oil and grease limit during the City's compliance monitoring (November 26, 2008). Therefore, the City is required to ensure that all instances of effluent limit exceedances are adequately documented in the permit files. (Section 9.4, Requesting, Receiving, and Analyzing Reports)

26. Clean Harbors' file review revealed that the discharger is using the wrong analytical method for analyzing titanium. Therefore, the City is required to have procedures to ensure that all analyses used during SIU self-monitoring events are in compliance with the regulations set forth at 40 CFR Part 136. (Section 9.4, Requesting, Receiving, and Analyzing Reports)
27. The COC reports submitted by Mohawk Packing and Jennings Technology do not specify the type of samples taken. Therefore, the City is required to review all SIU self-monitoring reports to ensure that the correct sample type was used during the self-monitoring event. (Section 9.4, Requesting, Receiving, and Analyzing Reports)

28. The site visits conducted during the PCA revealed that several additional SIUs should be required to develop and implement a slug discharge control plan. Therefore, the City is required to formally evaluate those facilities to determine if slug discharge control plans are needed. (Section 9.5, Slug Discharge Control Plans)

29. Table 5 of the ERP includes a violation type of *Falsification-Bypassing Sample Point*. The title of the violation is not consistent with the federal definition of a bypass. Therefore, the City is required to revise its description of the violation to reflect the federal definition. (Section 10.1, Deficiencies with the ERP)

30. The City failed to take appropriate enforcement actions against Mohawk Plating for violating its oil and grease effluent limit. Mohawk Packing exceeded its oil and grease limit on November 26, 2008. Therefore, the City must take enforcement action against Mohawk Packing for failure to comply with its discharge permit. (Section 10.2, Failure to Take Appropriate Enforcement Actions)

31. The City failed to take appropriate enforcement actions against Mohawk Plating and Prudential Overall Supply for exceeding the holding times of their pH samples. Therefore, the City must take enforcement actions against Mohawk Plating and Prudential Overall Supply for failure to comply with sampling requirements. (Section 10.2, Failure to Take Appropriate Enforcement Actions)

32. The site visit to Kearney Pattern Works and Foundry revealed that the facility was in violation of its zero-discharge permit. The City is required to take enforcement actions against Kearney Pattern Works and Foundry for violating its zero-discharge requirement. (Section 10.2, Failure to Take Appropriate Enforcement Actions)

33. Advance Surface Finishing's file review revealed that the facility is discharging without a valid permit, which is in violation of the City's SUO. Therefore, the City is required to take enforcement actions against Advance Surface Finishing for an unpermitted discharge. (Section 10.2, Failure to Take Appropriate Enforcement Actions)

13.2 Recommendations
1. Chapter 15.14 of the City's Sewer Use Regulations does not specifically outline all nondomestic discharger reporting requirements. To ensure that all nondomestic dischargers are aware of all reporting requirements, the City should include in its SUO either a reference to the reporting requirements listed at 40 CFR 403.8 and 403.12, or a list of the minimum federal reporting requirements. (Section 5.1, Required Streamlining Rule Changes)

2. The City's definition of significant change in the SUO does not include decreases in a nondomestic discharger's production or flow rate. Therefore, the auditors strongly recommend that the City revise its definition of significant change to include decreases in production and discharge flow. (Section 5.2, Definitions)

3. The SUO does not specifically list all the federally required reports. To ensure that all nondomestic dischargers are aware of all reporting requirements, the City should either include a reference to the reporting requirements listed at 40 CFR 403.8 and 403.12, or include in its SUO a list of the minimum federal reporting requirements. (Section 5.3, Reporting Requirements)

4. Section 15.14.585 does not specify that the director has the authority to develop additional limitations as deemed necessary. Therefore, the audit team recommends that the City revise its SUO to include a provision that allows the director to develop and implement additional limits as deemed necessary. (Section 5.4 Pretreatment Standards—Local Limits)

5. Coast Engraving's zero-discharge permit lists the applicable local limits, but it does not list the categorical effluent limits that would apply if the facility was to discharge process wastewater. Therefore, the auditors strongly recommend that the City includes in all zero-discharging CIU permits all applicable effluent limits—both local limits and categorical effluent limits. (Section 7.3, Categorical Standards)

6. The Jennings Technology Corporation's permit does not specify which limits (local limits or the adjusted categorical limits) are more stringent at sampling point 002. Because that is not clearly reflected in the permit, the auditors strongly recommend that the City revise Jennings Technology Corporation's permit to clearly reflect that both the local limits and the adjusted categorical limits are applicable at sampling point 002 and that the discharge could violate both sets of limits at the sampling point. Furthermore, the auditors recommend that the City clearly document this rationale within the facility's fact sheet. (Section 7.4, Application of Most Stringent Limit)

7. The fact sheets do not contain enough historical data to track or ensure that a discharger is correctly classified as an existing or new
source. Therefore, the audit team strongly recommends that the City include in each of the SIU fact sheets a timeline outlining the first date of production and any subsequent changes to the process line or facility. (Section 7.5, Fact Sheets)

8. The audit team found several deficiencies with the City's inspection procedures. The City should evaluate its inspection training modules for its inspectors to ensure that they emphasize the importance of thorough documentation, and the City should offer periodic training for inspectors to ensure that they are aware of the documentation requirements. (Section 9.2, Compliance Inspections)

9. During the site visits, the audit team noticed that the City inspectors routinely sign in at the facilities they are inspecting. Therefore, City inspectors should determine, before signing in, whether it would preclude them from reporting what they see during the inspection. (Section 9.2, Compliance Inspections)

10. Advance Surface Finishing's operations log, as explained by the facility representative, does not provide adequate operational data to confirm how much wastewater is generated in a day, how wastewater is being properly treated on that day, if the wastewater is stored for an additional period, or what the actual discharge volume was on a day. The City should require the facility to develop a batch discharge log to clearly document volumes of wastewaters generated, treated, or discharged daily. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

11. Advance Surface Finishing's wastewater pipes that convey industrial flows were not labeled. The audit team recommends that the facility properly label wastewater pipes so that industrial flows can be properly identified. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

12. The volume of Advance Surface Finishing's pH alarm was very low, and the audit team could barely hear it. The audit team recommends that the facility increase the volume of the audible alarm used to indicate pH values approaching effluent limits. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

13. Advance Surface Finishing and ALSOC did not have any cleaning documentation or calibration records to document proper maintenance of the pH probe. The City should require these facilities to implement a pH logging system to document pH probe cleaning, calibration, and general maintenance. The log should contain pH values, dates, times, and documentation of the person performing the tasks. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)
14. The APCT facility representative was confused as to where the correct sampling point for cyanide was. Even though the facility's cyanide sampling location is correct, the auditor strongly recommends that the City review with the facility representative the cyanide wastewater process and sample collection location to ensure that the representative understands the collection location. The collection location should also be noted on the map associated with the facility's fact sheet. The audit team also recommends that the City's industrial pretreatment program personnel have a detailed discussion with the facility representatives concerning regulatory authority for determining compliance with discharges to the sewer system (i.e., wastewater sample locations). The facility representatives should not be modifying operations that affect the quality of wastewaters discharged to the sewer system without properly notifying the City. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

15. The APCT facility representative was not knowledgeable of the types of products that are rinsed and cleaned in the general rinse area adjacent to the pretreatment area. The auditor recommends that the facility develop a standard for what items are appropriate to be rinsed in the general rinse area so the facility is aware of what wastestreams are flowing to its pretreatment system and so that noncategorical wastestreams are not being discharged with the categorical wastestreams. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

16. APCT's containment area did not appear to be large enough to contain the contents of the drums. The auditor recommends that the City discuss other means of chemical storage to ensure that chemicals are adequately contained. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

17. Coast Engraving's sampling methods are insufficient. The City should conduct a follow-up inspection to ensure that the facility is using appropriate sampling methods during its sample collection. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

18. The HED Battery Corporation facility representatives stated that they had never seen a copy of the facility's permit. The City should ensure that all zero-discharge permittees receive copies of their permits. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

19. During the Jennings Technology Corporation site visit, the auditor noted several areas of concern. The Tetra Tech inspectors strongly recommend that the City follow up with the facility to ensure that all the deficiencies noted during the inspection are corrected. Therefore, the City should conduct a follow-up visit with Jennings Technology to
ensure that all the areas of concern observed during this site visit are corrected or resolved. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

20. Micrel plans to expand its dry operations over the 2009 Christmas break. The audit team recommends that the City request the facility to give a formal submittal of the proposed changes before the Christmas break. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

21. Micrel has recently modified its pretreatment system in an effort to eliminate pH exceedances. The audit team recommends that the City request a timeline for the facility to formally modify its pretreatment system's standard operating procedures. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

22. Micrel does not have the ability to shut down or divert flows to holding tanks if the pH of the wastewater drops below the permitted limit of 6.5 standard units (s.u.). The City should evaluate whether the pH alarm set point of 6.5 s.u. is adequate to ensure that effluent will remain in compliance during peak flows. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

23. At Mohawk Packing, the auditor noticed that the boiler chemicals are stored in a drum in the boiler room and are not secondarily contained (a floor drain is in the room). Therefore, the auditor recommends that the City inform the discharger of the secondary containment requirements of all chemicals, and the City should conduct a follow-up inspection to ensure that the facility is properly storing all chemicals. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

24. At Prudential Overall Supply, the auditor noted a hand washing sink in the chemical storage area. The audit team recommends that the City require the facility to place a sign above the sink to warn against dumping any spent or unused chemicals down the drain. In addition, the audit team recommends that the City require the facility to conduct periodic training for employees on the proper chemical handling and disposal practices. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

25. At Solo Power, the auditor discussed permanently capping or plugging the facility's severed connection to the City's POTW system to ensure that discharges have been eliminated. The auditor recommends that the City follow up with facility to ensure that the facility has adequately capped or plugged its industrial wastewater connection to the City's POTW. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)
26. The THAT Corporation representative was unaware of how the water softener is maintained or where the brine regenerate water is disposed of. The audit team recommends that the City follow up with the facility to review the facility's water softener regeneration operation and discharge location. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

27. During the Xstrata Recycling site visit, there were no discussions about wet scrubbers, which are commonly used in processes such as those in operation at the facility. The auditor recommends that the City determine if the facility uses any wet scrubbers in any of its processes. If the facility does use wet scrubbers, the City should also discuss disposal practices for the wastewater generated from the wet scrubber. (Section 9.3, Nondomestic User Site Inspections Conducted during the Audit)

28. The ERP does not define the term prolonged periods. Therefore, the audit team strongly recommends that the City establishes a specific definition of prolonged periods so that the City can take consistent enforcement actions. (Section 10.1, Deficiencies with the ERP)

29. The audit team was unable to find adequate documentation in Coast Engraving's file to evaluate the facility's correct categorical classification. The auditors strongly recommend that the City research the history of the facility and resolve the missing information that could not be found in the files. Furthermore, the auditors recommend that the City maintain a comprehensive history of all SIUs to ensure that the City's classification rationale can be validated. (Section 11, Data Management)
RNC DATA ENTRY WORKSHEET

INSTRUCTIONS: Enter the data provided by the specific checklist questions that are referenced.

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NPDES number: CA0037842
Date of inspection: October 28-29, 2009
Date entered into PCS:

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| NA | Failure to enforce against pass through and/or interference |
| NA | Failure to submit required reports within 30 days |
| NA | Failure to meet compliance schedule milestone date within 90 days |
| NA | Failure to issue/reissue control mechanisms to 90% of SIUs within 6 months |
| NA | Failure to inspect or sample 80% of SIUs within the last 12 months |
| NA | Failure to enforce pretreatment standards and reporting requirements |
| X  | Other (Failure to adequately identifying and classifying zero-discharging CIUs) |

SNC

| NA | CA in SNC for violation of any Level I criterion |
| NA | CA in SNC for violation of two or more Level II criterion |

For more information on RNC, please refer to EPA's 1990 Guidance for Reporting and Evaluating POTW Noncompliance with Pretreatment Implementation Requirements.

RNC WORKSHEET COMPLETED BY: I-Hsin Lee
TITLE: Staff Engineer
DATE: 11/3/2009
TELEPHONE: 703-385-6000
INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.

Name of industry: Advance Surface Finishing

Address of industry: 1181 North 4th Street, Suite 50, San Jose, CA 95112

Date of visit: 10/29/2009  Time of visit: 11:00 a.m.

Name of inspector(s):
Shara Sedaghatpour, City of San Jose Environmental Inspector
Sudhir Singh, City of San Jose Environmental Inspector
Phil McGinnis, City of San Jose Permit Writer
Danny O'Connell, PG Environmental, LLC

Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jose Diaz</td>
<td>Operations Manager</td>
<td>(408) 427-5842</td>
</tr>
<tr>
<td>Sal Hamed</td>
<td>President</td>
<td>(408) 427-5842</td>
</tr>
</tbody>
</table>


Inspection Type/Purpose:  
X Scheduled  Unscheduled  PCA  
X PCI  New Company  Complaint

Please provide the following documentation:

1. Nature of operation:
The facility is a metal finisher specializing in coating of rigid and flexible printed circuit boards. The company currently provides the following surfaces: hard gold, soft bondable gold, nickel sulfamate, electroless nickel immersion gold, immersion silver, and immersion white tin.

2. Number of employees:
2–6 (varies based on workload)

3. Water source: San Jose Water Company

4. Wastestream flow(s) discharged to the POTW:
The facility discharges treated rinse waters from the nickel-plating operations, as well as ion exchange regenerate.


5. Describe any significant changes in process or flow:
The facility has eliminated the use of its reverse osmosis (RO) system. The RO system has been replaced with contractor-serviced resin columns.
6. Type of pretreatment system (Describe):
The facility's pretreatment system consists of a package treatment system (originally designed to treat a continuous effluent flow) which has been modified to provide batch treatment. The batch treatment system receives ion exchange regeneration waters from the ion exchange system supporting the closed-loop rinse water system. The treatment system provides pH neutralization of plating rinse waters and metals precipitation. Precipitated solids generated from the batch treatment process are processed by means of a plate-and-frame filter press. Pressed solids are collected for off-site disposal. The filtrate from press is returned to the treatment system for processing.

<table>
<thead>
<tr>
<th>NA</th>
<th>Continuous flow</th>
<th>X</th>
<th>Batch</th>
<th>NA</th>
<th>Combined</th>
</tr>
</thead>
</table>

7. Condition/operation of pretreatment system (Describe):
The package-type pretreatment system has been modified to operate as a batch treatment operation. Minimal flows are generated due to the use of the ion exchange system to maintain the quality of the recirculation and reuse of rinse waters.

Any unusual conditions or problems with the pretreatment system:
It is unclear whether the pretreatment system is operating as a true “batch” treatment process. A typical batch treatment operation batch-treats the complete volume of retained wastewater from a period of operation. The waters are tested for compliance, and then the complete volume of treated wastewater is discharged. Batch treatment operations may go days without an actual discharge and then discharge a thousand gallons.

The facility representatives stated that minimal gallons are treated daily. The documentation currently generated in facility operations logs does not clearly state the volumes of wastewater generated, treated, and discharged on a daily basis. Based on conversations with Mr. Hamed, president (the operations manager had to leave for an on-site appointment), the facility discharges only small volumes from the batch treatment process on a daily basis. This type of treatment process could be using dilution to meet effluent limits. It is unclear whether small volumes of untreated wastewaters receive actual treatment or if they just displace previously retained waters.

The treatment process at this facility needs to be thoroughly evaluated with the operations manager. The current operations log, as explained by Mr. Hamed, does not provide adequate operational data to confirm how much wastewater is generated in a given day, how wastewater is being properly treated on that given day, if the wastewater is stored for an additional time period, or what the actual discharge volumes was on a given day.

8. Process area description (identify raw materials and processes used):
The facility's process areas include shipping and receiving, masking operations, an automated etching machine, a manual silver plating operation, a manual gold plating operation, and numerous rinse tanks. All observed waters were either recirculated or contained in dead rinse tanks. Chemicals stored in the process area were within secondary containment. Raw materials observed included customer printed circuit boards, acid solutions (hydrochloric, nitric, and sulfuric), nickel solutions, and copper conditioner.
### SITE VISIT DATA SHEET (Continued)

<table>
<thead>
<tr>
<th>9. Condition/operation of process area (Describe):</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process area was clean and contained within secondary containment.</td>
</tr>
<tr>
<td>Any unusual conditions or problems with the process area: No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. General housekeeping in process area (Describe):</th>
</tr>
</thead>
<tbody>
<tr>
<td>The facility's housekeeping appeared to be adequate.</td>
</tr>
<tr>
<td>Any unusual conditions or problems with general housekeeping in process area: No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Chemical storage area (identify the chemicals that are maintained on-site and how they are stored):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids, caustics, and plating solutions were labeled and segregated within secondary containment.</td>
</tr>
<tr>
<td>Any floor drains?</td>
</tr>
<tr>
<td>General housekeeping of chemical storage area (Describe): The chemical storage area was clean. No evidence of spills or leaks was observed.</td>
</tr>
</tbody>
</table>

| 12. Are hazardous wastes drummed and labeled? | Yes |

| 13. Does the IU have hazardous waste manifests? | Yes. See Notes section. |
| Any problems associated with hazardous waste: | No |

<table>
<thead>
<tr>
<th>14. Solid waste production:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sludge from the filter press (treatment of solids precipitated from batch treatment system)</td>
</tr>
<tr>
<td>Solid waste disposal method(s): Sludge is hauled off-site for proper disposal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15. Description of sample location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling Point 001- Sampling tank (large industrial sink) located on the wall separating the process and office areas.</td>
</tr>
<tr>
<td>Sampling method/technique: The permit requires the collection of composite and grab samples.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Evaluation of self-monitoring data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>If yes, was self-monitoring adequate:</td>
</tr>
</tbody>
</table>
17. Who performs the self-monitoring analysis?  
This component was not reviewed during the inspection.

Notes:

- The City inspection team started the site visit by reviewing the previous inspection and actions taken by the facility.
- The inspection team confirmed capping of the cyanide rinse water discharge to the sewer system.
- The inspection team reviewed the facility's operation of the closed-loop system supporting the treatment of rinse waters (granular activated carbon and ion exchange).
- The inspection team confirmed the removal of the RO system and its discharge to the sewer. The facility is currently using contractor-serviced resin columns for the treatment of City water.
- The facility was not required to have a slug discharge control plan.
- Hazardous waste manifests were reviewed as a component of this inspection. At the time of inspection, the most recent removal for both acid and corrosives had occurred September 16, 2009.
- The City Inspection Team collected an effluent sample for analyses.
- The pH alarm system was evaluated as a component of the inspection.
  - The alarm was set for 6.5 and 10.5 standard units.
  - The volume of the alarm was very low; the inspection team could barely hear it. Facility operators stated that they could hear it clearly.
- The facility did not have any cleaning documentation or calibration records to document proper maintenance of the pH probe. In addition, the buffer solutions used for calibration had exceeded their expiration date.
- The City inspector reviewed the findings of the inspection with the facility representatives. The representatives were required to take the following actions:
  - Properly label wastewater pipes so that industrial flows can be properly identified.
  - Increase volume of the audible alarm used to indicate pH values approaching effluent limits.
  - Immediately implement a pH logging system to document pH probe cleaning, calibration, and general maintenance. Log should contain pH values, dates, times, staff member, etc.
  - Batch discharge log is required to clearly document volumes of wastewaters generated, treated, and/or discharged on a daily basis.
- The City is required to formally follow up on the inspection findings discussed with the facility representatives.
- The City is required to thoroughly evaluate the treatment process with the operations manager to ensure that dilution is not being used.
INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.

Name of industry: Allergen, Inc.
Address of industry: Confidential (see Notes section)
Date of visit: 10/29/2009  Time of visit: 10:00 a.m.
Name of inspector(s):
Liz Tyson, City of San Jose Environmental Inspector
Sudhir Singh, City of San Jose Environmental Inspector
Anju Whig, City of San Jose Sanitary Engineer
Brenner Perryman, PG Environmental, LLC

Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Gaylord</td>
<td>Environmental, Health and Safety Specialist</td>
<td>(408) 376-3039</td>
</tr>
<tr>
<td>Ray Mitsuda</td>
<td>Manufacturing Associate</td>
<td>(408) 376-3018</td>
</tr>
<tr>
<td>Tom Kawata</td>
<td>Senior Director Drug Substance Ops.</td>
<td>(408) 376-3001</td>
</tr>
</tbody>
</table>

IU Permit Number: WV-044B  Exp Date: 11/1/2013
IU Classification: 40 CFR 439.17

Inspection Type/Purpose
- X Scheduled
- Unscheduled
- PCA
- New Company
- Complaint

Please provide the following documentation:

1. Nature of operation:
The facility produces raw Clostridium botulinum for the botox industry.

2. Number of employees: 40
   Number of shifts: 1
   Hours of operation: 8:00 AM to 5:00 P.M.; Mon. – Fri.

3. Water source: San Jose Water Company

4. Wastestream flow(s) discharged to the POTW:
The facility representative stated that pretreated wastewaters from the primary and secondary biological purification processes, clean-in-place water, and acidic and basic cleaning agents are discharged to the POTW. The facility representatives reported a discharge volume of approximately 600 liters per day.

| Sanitary: | (gpd) | Process: | ~ 159 (gpd) | Combined: | (gpd) |

5. Describe any significant changes in process or flow:
No significant changes were reported by the facility representatives.
### SITE VISIT DATA SHEET (Continued)

6. **Type of pretreatment system (Describe):**
The facility's pretreatment system was not reviewed (NR) during the inspection. See the Notes section for a further discussion.

<table>
<thead>
<tr>
<th>NR</th>
<th>Continuous flow</th>
<th>Batch</th>
<th>NR</th>
<th>Combined</th>
</tr>
</thead>
</table>

7. **Condition/operation of pretreatment system (Describe):**
The condition and operation of the facility's pretreatment was not reviewed during the inspection. See the Notes section for a further discussion.

   _Any unusual conditions or problems with the pretreatment system: Not reviewed._

8. **Process area description (identify raw materials and processes used):**
The facility's process area was not reviewed during the inspection. See the Notes section for a further discussion.

9. **Condition/operation of process area (Describe):**
The condition and operation of the facility's process area were not reviewed during the inspection. See the Notes section for a further discussion.

   _Any unusual conditions or problems with the process area: Not reviewed._

10. **General housekeeping in process area (Describe):**
The facility's housekeeping was not reviewed during the inspection. See the Notes section for a further discussion.

   _Any unusual conditions or problems with general housekeeping in process area: Not reviewed._

11. **Chemical storage area (identify the chemicals that are maintained on-site and how they are stored):**
The facility stores small amounts of chemicals within chemical storage cabinets. The cabinets were segregated based on acids, bases, and corrosives.

   _Any floor drains? No | Any spill control measures? Yes_

   _General housekeeping of chemical storage area (Describe): Not reviewed._

12. **Are hazardous wastes drummed and labeled?** Not reviewed.

13. **Does the IU have hazardous waste manifests?** Not reviewed.

   _Any problems associated with hazardous waste: Not reviewed._

14. **Solid waste production:** Not reviewed.

   _Solid waste disposal method(s): Not reviewed._
15. Description of sample location:
The sample location is an underground sample box within the facility, which has a bolted-down cover and appeared to be downstream of the pretreatment operations.

16. Evaluation of self-monitoring data:
X Yes  No  N/A
If yes, was self-monitoring adequate:

17. Who performs the self-monitoring analysis?
A contract laboratory, Dysert Environmental, collects and analyzes the facility's wastewater samples.

Notes:
- The facility produces raw Clostridium botulinum for the botox industry. The facility's manufactured product is regulated by agencies such as the Centers for Disease Control (CDC), Food and Drug Administration (FDA), and Federal Bureau of Investigation (FBI) because its product could be used as a biological weapon. For this reason, the facility representatives asked to keep the facility's location confidential. Furthermore, the facility representatives would not grant the EPA contractor access to the production area. The facility's production area also houses the facility's wastewater pretreatment operations, and therefore, these areas were not reviewed during the inspection. The City inspectors explained to the facility representatives that not allowing the EPA contractor access to these areas would be a considered a denial of entry, and they reviewed the Power to Inspect stipulation in Part E of the facility's permit with the facility representatives. The EPA contractor formally reviewed the issue with the facility representatives as well to no avail.

The City inspectors explained to the facility representatives that they would most likely issue the facility a notice of violation (NOV) letter for denying entry into the facility's production area. The City was required to take adequate enforcement action as outlined in its Enforcement Response Plan.

In response, the City adequately issued the facility a NOV letter on November 13, 2009 for not allowing access to the production area. The facility was required to respond to the NOV letter explaining the cause of the violation, remedies taken for the violation, and future steps to be implemented to ensure future consistent compliance with federal, state and local regulations.

The facility responded to the NOV letter on December 1, 2009. The review of the facility's NOV response reveals an inaccurate account of the inspection. Specifically, the second to last paragraph in the NOV response letter states "had the EPA contracted employee provided the information required to confirm his status with the Agency he would have been provided access." This statement is incorrect. The EPA Contractor provided the EPA Contractor credential badge to multiple facility representatives for their review, therefore confirming his status with the agency, and providing the permit required identification for the purpose of inspection.

- The facility representative stated that the facility was in a "decontaminated state" and that "no production was taking place." No flow was observed in the wastewater sample location.

- The facility representative explained that all wastewater from the production area flows to the facility's pretreatment system; and that the pretreatment system consists of a sump, a kill tank with heat sterilization (~128° Celsius for 30-plus minutes), and pH adjustment with sodium hydroxide or phosphoric acid. The facility representative further explained that the facility batch-discharges. The volume of the sump is 264 gallons (1,000 liters), and the facility typically runs a treatment cycle once the sump reaches 60% of capacity, thus batch-discharging approximately 158 gallons (600 liters) each discharge.
INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.

Name of industry: ALSCO
Address of industry: 2275 Junction Avenue, San Jose, CA 95131
Date of visit: 10/28/2009 Time of visit: 11:10 a.m.

Name of inspector(s):
Mharr Dirige, City of San Jose Environmental Inspector
Tellis Hynes, City of San Jose Environmental Inspector
Phil McGinnis, City of San Jose Permit Writer
Danny O’Connell, PG Environmental, LLC

Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Johnson</td>
<td>General Manager</td>
<td>(408) 279-2345</td>
</tr>
<tr>
<td>Fabian Fernandez</td>
<td>Chief Engineer</td>
<td>(408) 279-2345</td>
</tr>
</tbody>
</table>

IU Permit Number: SJ-546B Exp Date: 5/28/2012 IU Classification: SIU – Industrial Laundry

Inspection | X | Scheduled | Unscheduled | PCA
Type/Purpose | X | PCI | New Company | Complaint

Please provide the following documentation:

1. Nature of operation:
The facility is an industrial laundry providing uniform, linen, mop, and rug services to hotels, restaurants, and bars.

2. Number of employees: 102
Number of shifts: 1
Hours of operation: 5:30 a.m –2:30 p.m.; Mon–Fri

3. Water source:
San Jose Water Company

4. Wastestream flow(s) discharged to the POTW:
The facility discharges wash and rinse waters from the laundering process. Rinse waters are recycled as wash water when operations permit.

Sanitary: Not Applicable (NA) Process: 70,000 (gpd) Combined: NA (gpd)

5. Describe any significant changes in process or flow:
The facility added a centrifuge to the pretreatment treatment process to enhance solids removal.
6. Type of pretreatment system (Describe):
The pretreatment system consists of two process water holding tanks, a microfiltration system (treated water is delivered and stored in the “Hot Water Storage Tank” for reuse, and concentrated microfiltration waste is forwarded to the “Concentrate Tank” for additional treatment), a concentrate tank, an oil/water separation tank, and a centrifuge. The pretreatment system also has a number of screens located in floor trenches conveying wastewaters to remove debris (fabric, lint, general debris). The facility also has a final screening station prior to the “Gray Water” discharge to the sewer.

<table>
<thead>
<tr>
<th></th>
<th>Continuous flow</th>
<th>NA</th>
<th>Batch</th>
<th>NA</th>
<th>Combined</th>
</tr>
</thead>
</table>

7. Condition/operation of pretreatment system (Describe):
The pretreatment system appeared to be well maintained. There were no signs of spills or malfunctioning components in the pretreatment area.

Any unusual conditions or problems with the pretreatment system: NA

8. Process area description (identify raw materials and processes used):
The process area consisted of seven washers (each capable of washing 450 pounds of material), one tunnel washer, and four industrial-sized dryers. The tunnel washer was supported by a SCADA-type operational system, which controlled the addition of detergents, solvents, and additives used in the cleaning process. Bulk chemicals and cleaning solutions were stored outside in the fenced area.

9. Condition/operation of process area (Describe):
The process area was highly organized for efficiency of laundry movement and chemical delivery.

Any unusual conditions or problems with the process area: No

10. General housekeeping in process area (Describe):
The facility has been designed to promote efficiency, which has minimized housekeeping issues. All process areas inspected were clean and well organized.

Any unusual conditions or problems with general housekeeping in process area: No
11. Chemical storage area (identify the chemicals that are maintained on-site and how they are stored):
Chemicals and cleaning solutions were stored outside in the fenced area. The fenced area housed five tanks ranging from approximately 10 to 15 feet high and 8 feet in diameter. This area was not covered (did not have a roof). The tanks were reported to be double-walled and did not have secondary containment. The hose taps did not have spill containment.

The facility also had a storage area for waste fats, oils, and grease (FOG) generated from the pretreatment process. (FOG residues are found on linens from bars and restaurants.) This area was covered. The area had a tank (~12 feet by 8 feet), 3-55 gallon drums, and one 30-gallon drum stored without secondary containment.

<table>
<thead>
<tr>
<th>Any floor drains?</th>
<th>No</th>
<th>Any spill control measures?</th>
<th>Yes</th>
</tr>
</thead>
</table>

General housekeeping of chemical storage area (Describe): The chemical storage area was clean. No evidence of spills or leaks was observed within the chemical and FOG storage areas.

12. Are hazardous wastes drummed and labeled? No
13. Does the IU have hazardous waste manifests? Yes

Any problems associated with hazardous waste: Yes. A waste oil drum was not labeled as required.

14. Solid waste production:
The pretreatment system centrifuge and oil-water separator produce significant volumes of waste FOG.

Solid waste disposal method(s): Waste FOG removed from the pretreatment system is placed in a contractor's 20-cubic-yard bin for off-site disposal.

15. Description of sample location:
The sampling location is a manhole located in the boiler room.

Sampling method/technique: The permit requires the collection of grab samples.

16. Evaluation of self-monitoring data: Yes X No NA

If yes, was self-monitoring adequate: NA

17. Who performs the self-monitoring analysis?
This component was not reviewed during the inspection.
The last waste manifest was reviewed as a component of this inspection. On September 18, 2009, the facility had nonhazardous waste (foods, fats, and oils) hauled off-site for disposal.

The 20-cubic-yard bin used to store some of the waste FOG removed from the pretreatment system had a small leak. The waste FOG was leaking to the ground along the facility's rear parameter fence.

The facility did not have secondary containment for FOG storage (one 12-foot by 8-foot tank, three 55-gallon drums, and one 30-gallon drum).

The bulk chemical storage and cleaning solution area did not have secondary containment; however, the facility representatives stated that the tanks were double-walled. An inspection of this area also found that the tank hose taps did not have permanent spill trays, and a garden-type hose that appeared to be used for cleanup (by hosing the area down) was observed.

The facility has a water softener system designed to treat up to 131,600 gpd. Facility representatives stated that the system does not have to be regenerated and there is no discharge to the sewer system from the water softener system.

The facility did not have a slug discharge control plan.

The facility did not have any cleaning or calibration records to document proper maintenance of the pH probe.

The City inspector reviewed the findings of the inspection with the facility representatives. The representatives were required to take the following actions:

- Label the waste oil as hazardous waste as required by law.
- Take immediate action to eliminate the leak from the FOG waste bin.
- Immediately implement a pH logging system to document pH probe cleaning, calibration, and general maintenance.
- Remove the garden hose from the bulk chemical and solution storage area and implement a dry cleanup standard operating procedure.
- Evaluate and provide maintenance requirements (i.e., regeneration protocols) for the water softener system.

The City is required to formally follow up on the inspection findings and required actions.

The City is required to formally evaluate the facility's need for a slug discharge control plan based on the volume and concentration of raw chemicals and cleaning solutions stored and used on-site. The "emergency process schematic" provided in the facility's permit application states that wastewater discharges will by-pass the pretreatment system and go directly to the sewer in emergency situations.
## SITE VISIT DATA SHEET

**INSTRUCTIONS:** Record observations made during the IU site visit. Provide as much detail as possible.

### Name of industry: APCT, Inc.

**Address of industry:** 3495 De La Cruz Boulevard, San Jose, CA 95054

**Date of visit:** 10/29/2009  
**Time of visit:** 9:10 a.m.

### Name of inspector(s):
- Claire Boswell, City of San Jose Environmental Inspector  
- Anju Whig, City of San Jose Sanitary Engineer  
- Heidi Geiger, City of San Jose  
- Brenner Perryman, PG Environmental, LLC

### Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolf Belz</td>
<td>Environmental Manager</td>
<td>(408) 727-6442</td>
</tr>
</tbody>
</table>

**IU Permit Number:** SC-400A  
**Exp Date:** 10/14/2013  
**IU Classification:** 40 CFR 433.17

**Inspection**

<table>
<thead>
<tr>
<th>Type/Purpose</th>
<th>Scheduled</th>
<th>Unscheduled</th>
<th>PCA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
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</table>

**Inspection**

<table>
<thead>
<tr>
<th>Type/Purpose</th>
<th>New Company</th>
<th>Complaint</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**Please provide the following documentation:**

1. **Nature of operation:**
   - The facility manufactures multilayer, single-sided, rigid printed circuit boards. It conducts copper, tin, lead, and gold plating and etching operations.

2. **Number of employees:** ~70  
   **Number of shifts:** 2  
   **Hours of operation:** 7:00 a.m.–12:00 a.m.; Mon–Fri

3. **Water source:**  
   - Santa Clara Water Company

4. **Wastestream flow(s) discharged to the POTW:**
   - The facility discharges pretreated wastewater from the plating lines and from the etching process.

   **Sanitary:**  
   **Process:** ~80,000 (gpd)  
   **Combined:** NA (gpd)

5. **Describe any significant changes in process or flow:**
   - No significant changes were reported or observed.
### SITE VISIT DATA SHEET (Continued)

<table>
<thead>
<tr>
<th>Continuous flow</th>
<th>X</th>
<th>Batch</th>
<th>Combined</th>
</tr>
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</table>

6. **Type of pretreatment system (Describe):**
The facility's pretreatment consists of a batch treatment process. Metal-bearing wastestreams are collected in a sump for pH adjustment and then pumped to a lamella clarifier for metals settling. The wastestream then flows to combine with "clean water" (wastewater from the developer). The combined wastewaters are sampled for pH in a final holding tank and then discharged to the POTW. Sludge from the clarifier is pumped through a filter press. The filtrate is pumped back to the metal-bearing sump to be retreated, and the solids are collected to be hauled off-site for disposal.

7. **Condition/operation of pretreatment system (Describe):**
The facility's pretreatment system had numerous flex-pipes and pumps crossing from one area to another. The flow of the wastewater was not clear or apparent without explanation from the facility representative. It appeared that the system had been modified from the original design by adding more tanks, pipes, and pumping options.

   Any unusual conditions or problems with the pretreatment system: No.

8. **Process area description (identify raw materials and processes used):**
The facility uses laminated copper boards to manufacture printed circuit boards. The copper boards are washed, exposed, developed, and etched. The boards are plated with copper, tin lead, and/or gold, depending on the customer's design and needs.

9. **Condition/operation of process area (Describe):**
The process area was clean. The gold-plating area was within secondary containment and segregated from the other plating operations.

   Any unusual conditions or problems with the process area: No.

10. **General housekeeping in process area (Describe):**
The facility's housekeeping inside the processing area was acceptable; the area was clean.

    Any unusual conditions or problems with general housekeeping in process area: No.
11. Chemical storage area (identify the chemicals that are maintained on-site and how they are stored): Chemicals are stored in drums outside the building. The drums were labeled and were stored within a secondary containment berm that was approximately 2½-inches high. There were 21 drums within the containment area. See Notes section for further discussion.

| Any floor drains? | Yes | Any spill control measures? | Yes |

General housekeeping of chemical storage area (Describe): The chemical storage area had what appeared to be an oily residue and liquid within the containment area.

12. Are hazardous wastes drummed and labeled? Not reviewed
13. Does the IU have hazardous waste manifests? Not reviewed
14. Any problems associated with hazardous waste: Not reviewed

14. Solid waste production:
   Sludge from the clarifier.

Solid waste disposal method(s): Sludge from the clarifier is collected for off-site disposal.

15. Description of sample location:
The facility's wastewater sample location is an aboveground sample box downstream of the pretreatment system.

Sampling method/technique: The facility's permit requires that both grab and composite samples be collected.

| Evaluation of self-monitoring data: | Yes | X | No | N/A |

16. If yes, was self-monitoring adequate:

17. Who performs the self-monitoring analysis? The facility uses the contracted Torrent Laboratory to collect and analyze wastewater samples.
• The EPA contracted inspector questioned the facility representative about the facility's volume of wastewater flow (approximately 80,000 gpd). The facility representative stated that they constantly run their rinse waters (which flow to the metal-bearing wastewater sump) because the pretreatment system cannot handle the high concentrations of chemicals. Prohibited Substances in Part E of the facility's permit requires the facility to abide by Santa Clara City Code Chapter 13.10. Santa Clara City Code Chapter 13.10.320 prohibits "the use of diluting waters as a partial or complete substitute (1) for adequate treatment, (2) to achieve compliance, or (3) to meet local limitations for wastewater." The City is required to evaluate the facility's wastewater flow and rinse water operations and to ensure that the facility's pretreatment system is adequately designed to handle chemical concentrations without the use of dilution.

• The facility representative questioned the inspection team about the location where cyanide wastewater samples should be collected. The facility representative stated that other regulatory agencies had recently inspected the facility. Those agencies may have provided comment and input regarding the facility's gold plating process, which incorporates cyanide, thus causing some confusion. Based on the discussion and observations of the gold plating process, it appeared that the facility has been taking the cyanide sample from the correct location. The inspection team strongly recommends that the City review the cyanide wastewater process and collection location with the facility representative to ensure that the collection location is understood. The collection location should be noted on the map associated with the facility's fact sheet. The inspection team also recommends that the City's industrial pretreatment program personnel have a detailed discussion with the facility representatives concerning regulatory authority for determining compliance with discharges to the sewer system (i.e., wastewater sample locations). The facility representatives should not be modifying operations that impact the quality of wastewaters discharged to the sewer system without properly notifying the San Jose IPP.

• The facility has a "general rinse area" adjacent to the pretreatment area. The EPA contracted inspector questioned the facility representative about what parts are rinsed in the general rinse area. The facility representative stated that he "never knows what is being rinsed." Wastewater from the general rinse area flows to the metal-bearing wastestream sump to be treated. The inspection team recommends that the facility develop a standard for what items are appropriate to be rinsed in the general rinse area so that the facility is aware of what wastestreams are flowing to its pretreatment system and so that non-categorical wastestreams are not being discharged to the categorical wastestreams.

• The chemical storage area was filled with twenty-one 55-gallon drums of stored chemicals. The drums were contained within a 2½-inch secondary containment berm. The containment area did not appear to be large enough to contain the contents of the drums. The containment area had a floor drain, which, according to the facility representative, drains to a dead sump within the facility. The inspection team recommends that the City discuss other means of chemical storage to ensure that chemicals are adequately contained.

• The City inspector collected a pH sample from the facility's sample box. The pH of the sample was 9.4 standard units (s.u.) at 10:37 a.m. The facility's fixed pH meter had a reading of 9.7 s.u.

• The effluent in the facility's sample box appeared to be grey and cloudy.
SITE VISIT DATA SHEET

INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.

Name of industry: Babbitt Bearing Company
Address of industry: 1170 North 5th Street, San Jose, CA 95112
Date of visit: 10/29/2009  Time of visit: 8:15 a.m.

Name of inspector(s):
Shara Sedaghatpour, City of San Jose Environmental Inspector
Sudhir Singh, City of San Jose Environmental Inspector
Phil McGinnis, City of San Jose Permit Writer
Danny O'Connell, PG Environmental, LLC

Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerry Mann</td>
<td>Vice President</td>
<td>(408) 298-1101</td>
</tr>
</tbody>
</table>

IU Permit Number: SJ-555Z  Exp Date: 2/10/2013  IU Classification: Zero-Discharger - 40 CFR Part 413

Inspection Type/Purpose
X Scheduled  Unscheduled  PCA

Please provide the following documentation:

1. Nature of operation:
The facility is a job shop with casting, machining, and metal-plating operations. The company provides services to clients ranging from the aerospace industry to wastewater treatment operations.

2. Number of employees: 25  Number of shifts: 1  Hours of operation: 6:00 a.m.–3:30 p.m.; Mon–Fri

3. Water source: San Jose Water Company

4. Wastestream flow(s) discharged to the POTW:
The facility does not discharge industrial wastestreams to the POTW. All industrial wastestreams are collected and either reused or hauled off-site for disposal. The facility is permitted as a zero-discharger.


5. Describe any significant changes in process or flow:
The inspection team identified a tin-antimony casting operation. This operation did not generate a discharge of wastewater.

6. Type of pretreatment system (Describe):
The facility does not have a pretreatment system because industrial waste is collected, reused, or hauled off-site for disposal. The liquid wastestream collected for off-site disposal consists of spent chrome plating and stripping solutions.

NA | Continuous flow | NA | Batch | NA | Combined
| 7. | Condition/operation of pretreatment system (Describe): | NA |
| Any unusual conditions or problems with the pretreatment system: | NA |
| 8. | Process area description (identify raw materials and processes used): | The facility has a casting operation and numerous cutting and lathe machines for the manufacture of custom parts for clients. These operations are supported by grinding operations. The facility's categorical operation has zero discharge for the chrome-plating line. The dead rinse water from the chrome-plating operations is supported by a closed-loop system that circulates water through the air scrubber system. The plating area has a stripper tank used to remove chrome from off-spec products. This tank was labeled for the raw chemical tetrapotassium pyrophosphate, which is used in the stripping process and stated to be "Non RCRA" (not for the quality of the actual working solution, which would contain chromium). |
| 9. | Condition/operation of process area (Describe): | The process areas were kept organized. Cutting fluids and oils were contained in machines and, in some cases, in small containers adjacent to machines. Oils (two 5-gallon containers) adjacent to the compressor were not stored within secondary containment. Absorbent and spill kits were available to operators. |
| Any unusual conditions or problems with the process area: | No |
| 10. | General housekeeping in process area (Describe): | The facility's housekeeping appeared to be adequate. Mop water and hoses were observed in the process area. |
| Any unusual conditions or problems with general housekeeping in process area: | No |
| 11. | Chemical storage area (identify the chemicals that are maintained on-site and how they are stored): | Inside Building: The chemicals were labeled and within secondary containment. The chemicals observed during the inspection included chromic acid, nitric acid, all-purpose oils, solvents, and tetrapotassium pyrophosphate. Outside Building: In the rear of the primary building, the facility had a Rubbermaid-type shed used for chemical storage. A number of the chemical containers were not labeled or stored within secondary containment. |
| Any floor drains? | No | Any spill control measures? | Yes |
| General housekeeping of chemical storage area (Describe): | No evidence of spills or leaks was observed. |
| 12. | Are hazardous wastes drummed and labeled? | Yes |
| 13. | Does the IU have hazardous waste manifests? | Yes. See Notes section. | Yes |
| Any problems associated with hazardous waste: | No (however, the last manifest was not legible). |
### SITE VISIT DATA SHEET (Continued)

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<table>
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<tr>
<td><strong>14. Solid waste production:</strong> This component was not reviewed during the inspection.</td>
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<tr>
<td>Solid waste disposal method(s):</td>
<td>NA</td>
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<tr>
<td><strong>15. Description of sample location:</strong></td>
<td>NA</td>
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<tr>
<td><strong>Sampling method/technique:</strong></td>
<td>NA</td>
</tr>
<tr>
<td><strong>16. Evaluation of self-monitoring data:</strong></td>
<td>Yes</td>
</tr>
<tr>
<td>If yes, was self-monitoring adequate:</td>
<td>NA</td>
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<tr>
<td><strong>17. Who performs the self-monitoring analysis?</strong></td>
<td>NA</td>
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### Notes:

- Hazardous waste manifests were reviewed as a component of this inspection. On May 7, 2009, the facility had Asbury Environmental Services haul the following off-site for proper disposal: general chrome debris, stripper tank waste, and waste muriatic acid.  
- Residual debris in dead rinse tanks are hauled off approximately every two years.  
- The City inspection team conducted an exit interview summarizing the observations made during the site inspection. The inspectors required the following actions:  
  - The chemicals stored in the exterior Rubbermaid-type shed require proper labeling and secondary containment.
  - The cutting fluids and oils stored in small containers adjacent to machines require proper labeling and secondary containment.
  - Due to the facility’s use of hoses and buckets to support process operations, the lead inspector requested that a training program be developed to ensure that wastewater and oils contained in small containers are properly managed.
  - A labeling system must be implemented for all process lines associated with the plating and scrubber recirculation system.
- The tin casting operation was not documented in previous reports. This operation could fall under 40 CFR Part 471 if metal forming is associated with the procedures implemented for this product. This operation was not reviewed as a component of the inspection. The City is required to formally evaluate the tin casting operations with respect to the regulations at 40 CFR Part 471.  
- The facility has a tetrapotassium pyrophosphate stripper tank labeled “Non-RCRA.” The fact that the virgin stripper solution, tetrapotassium pyrophosphate, is not RCRA does not mean that the contaminated stripper solution is Non-RCRA. The City is required to ensure that process tanks are properly labeled and managed.
INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.

Name of industry: Clean Harbors
Address of industry: 1021 Berryessa Road, San Jose, CA 95133
Date of visit: 10/29/09 Time of visit: 9:00 AM
Name of inspector(s):
I-Hsin Lee, Tetra Tech, Inc.
Mharr Dirige, Tellis Hynes, and Paul Alexia, City of San Jose

Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Marlowe</td>
<td>Facility General Manager</td>
<td>408-441-0962</td>
</tr>
<tr>
<td>Ho M. Kim</td>
<td>Senior Compliance Manager</td>
<td>408-441-0962</td>
</tr>
</tbody>
</table>

IU Permit Number: Exp Date: IU Classification: CIU: 40 CFR 469,
Inspection Type/Purpose
Scheduled x Unscheduled x PCA PCI New Company Complaint

Please provide the following documentation:

1. Nature of operation:

The facility is a centralized waste treatment facility subject to 40 CFR Part 437, subpart A. The facility accepts hazardous waste, and tanker or drum waste. All wastes are profiled before acceptance. The facility representative indicated that only the wastes from the tankers are treated on-site. All other wastes are sent off-site for disposal.

2. Number of employees 24 Number of shifts: 1 Hours of operation: 8 to 5 pm 5 days a week

3. Water source: City of San Jose

4. Wastestream flow(s) discharged to the POTW:

Groundwater that has been used by the cooling tower, stormwater, and centralized treated wastes

|-----------------------------------|-------------------|--------------------|

5. Describe any significant changes in process or flow:

Facility and City representative indicated that there were no planned changes to process or flow.
6. Type of pretreatment system (Describe):

Centralized wastes are processed via a physical and/or chemical treatment. How the waste is treated is dependent on the types of waste. Solids are removed via a filter press and all treated wastewater is sent through a bag filtration system.

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<th>Continuous flow</th>
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7. Condition/operation of pretreatment system (Describe):
The system is well organized and labeled. System area was bermed and very clean.

Any unusual conditions or problems with the pretreatment system: None

8. Process area description (identify raw materials and processes used):

Chemical treatment includes antifoam, sodium hydroxide, sodium sulfite, line and/or sulfuric acid addition.
Additional treatment includes pH adjustment, cyanide treatment and chromium reduction.

9. Condition/operation of process area (Describe):
The system is well organized and labeled. System area was bermed and very clean.

Any unusual conditions or problems with the process area:
None

10. General housekeeping in process area (Describe):
Good.

Any unusual conditions or problems with general housekeeping in process area:
None
SITE VISIT DATA SHEET (Continued)

11. Chemical storage area (identify the chemicals that are maintained on-site and how they are stored):

   All chemicals were segregated by type. All barrels were properly labeled.

   | Any floor drains? | No | Any spill control measures? | Yes |

   General housekeeping of chemical storage area (Describe):

   Very clean and well organized.

12. Are hazardous wastes drummed and labeled? Yes

13. Does the IU have hazardous waste manifests? Not applicable.

   Any problems associated with hazardous waste: None

14. Solid waste production:

   Filter cake for the plate and frame filter press

   Solid waste disposal method(s):
   The filter cake is disposed of at a Hazardous Waste Subtitle C landfill.

15. Description of sample location:

   The facility has 2 sampling locations. Sampling point 1 is located east of the pad area, in the north corner left of the entrance road. The second sampling point is after the introduction of the cooling tower blowdown.

   Sampling method/technique: Not evaluated

16. Evaluation of self-monitoring data:  x  Yes  No  N/A

   If yes, was self-monitoring adequate: Titanium was analyzed using method 200.7

17. Who performs the self-monitoring analysis? Accutest

   Notes:

   The facility representative indicated that some of the drummed acid and alkaline wastes are stabilized on-site and then repackaged for off-site disposal or additional off-site treatment. When asked, the City inspectors were unsure as to whether a flow balance had ever been conducted to ensure that the acids and alkaline wastes that the facility stabilizes are not discharged to the City. Because the facility is not permitted to discharge such wastes to the City, the City is required to ensure that the wastes are properly disposed of and not discharged to the City.

   The facility also acts as a transfer point for some wastes. These wastes are actually manifested for other Clean Harbor locations. These wastes are kept on the facility for a maximum of 10 days.
### SITE VISIT DATA SHEET

**INSTRUCTIONS:** Record observations made during the IU site visit. Provide as much detail as possible.

**Name of industry:** Coast Engraving, Inc.

**Address of industry:** 1097 North 5th Street San Jose, CA 95112

**Date of visit:** 10/28/09 **Time of visit:** 12:00 p.m.

**Name of inspectors:** Sharra Sedaghatpour, Paul Alexa, and Steven Lowes, City of San Jose

Christine Wong, Tetra Tech, Inc.

**Provide the name(s) and title(s) of industry representative(s):**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Sam Wool</td>
<td>Manager</td>
</tr>
</tbody>
</table>

**IU Permit Number:** Exp. Date: IU Classification: CIU subject to 40 CFR 413.64

**Inspection Type/Purpose:**

- ✔ Scheduled
- Unscheduled
- ✔ PCA
- PCI
- New Company
- Complaint

**Please provide the following documentation:**

1. **Nature of operation:**

   The facility is permitted as a zero-discharge CIU subject to 40 CFR 413 Subparts A-H, but it is actually a discharging job shop metal finisher that should be classified as a CIU subject to 40 CFR 413.64. It is a screen, paper, and metal plate printing job shop that produces signs, stickers, and nameplates to customer specification. Production is highly variable. The facility is housed in one building with screen printing, metal processing, maintenance, and administration areas. The facility has been owned and operated by the same family for over 20 years.

2. **Number of employees:** 15 **Number of shifts:** 1 **Hours of operation:** 8 a.m. – 4 p.m.; 5 days/week

3. **Water source:** San Jose Water Company.

4. **Wastestream flow(s) discharged to the POTW:** Currently, the facility only discharges domestic wastewater to the collection system, because the City has ordered the facility to stop discharging. Before it ceased discharging in August 2009, the facility was discharging an unknown amount of unregulated process wastewater from the screen printing process, and approximately 1,200 gallons per month of process wastewater from a metal finishing operation. Domestic wastewater is discharged from a separate lateral to the collection system.

   **Sanitary:** (gpd) **Process:** (gpd) **Combined:** (gpd)

5. **Describe any significant changes in process or flow:**

   The facility is not currently discharging any process wastewater, per the order of the City, but there has been no significant change to its production processes and wastewater generation in the recent past and there are no plans to change operations in the near future.

6. **Type of pretreatment system (Describe):**

   When the facility is discharging, rinse waters from the screen printing process are discharged directly to the collection system without treatment. Wastewaters generated from the metal finishing process are collected, treated with a flocculant, and then filtered to remove the sludge. The filtrate is discharged to the collection system. Occasionally, the facility tests the discharge with pH strips (but does not adjust the pH of the wastewater) before discharging.

   **Continuous flow** ✔ Batch **Combined**
7. Condition/operation of pretreatment system: Good ✔ Fair Poor

8. Process area description (identify raw materials and processes used): The screen and paper printing processes include a step involving developer and fixer solution. These solutions are collected and hauled away or recycled (silver recovery), and are never discharged to the collection system.

The fabric screen printing process includes application of an emulsion solution to set the image. Before the facility was ordered to stop discharging process wastewater, the emulsion solution was hand-rinsed off screens into a sink that drains directly to the collection system. Currently, the facility collects the emulsion rinse water in 5-gallon buckets and sends it through the pretreatment system.

The facility adheres printed film onto large magnesium plates (several feet long and wide) and exposes the plate to light to develop the desired images. The plates are descummed using a gum solution and placed in (one of two) 15 percent nitric acid baths to etch away the unprinted areas. After the etching bath, the plates are dipped in a slightly caustic (5 percent) solution for neutralization, manually rinsed with water in a sink, dried, and then sheared to specification (e.g., to make nameplates). The facility typically produces 6 plates per day. The gum solution is discharged to the pretreatment system. The caustic solution is discharged (about 3 gallons) to the pretreatment system approximately every 2 months when the solution is too contaminated to use. The nitric acid baths are discharged to the pretreatment system approximately once each week when in use. Facility representatives stated that this process has been in place for over 20 years. Since the facility had been ordered to stop discharging, it has been collecting its wastewater and having it hauled off.

9. Condition/operation of process area: Good ✔ Fair Poor

10. Chemical storage area (identify the chemicals that are maintained on-site and how they are stored): Small drums (10 gallons or less) of chemicals (fix, developer, emulsion solution, acids, bases, and solvents) are stored throughout the facility. The solvents are stored in 1-gallon or smaller containers. Some of the barrels, including those expected to contain hazardous waste, were not labeled. There are no floor drains in the facility.


General housekeeping: Good ✔ Fair Poor

11. Are hazardous waste drummed and labeled? No, most drums were not labeled. Some barrels of hazardous waste had been stored for more than 90 days.

12. Does the IU have hazardous waste manifests? Yes. The City collected manifests during inspections. Any problems associated with hazardous waste: Yes. The hauler, GEM, has not come by to pick up the wastewater and there is excess untreated wastewater.

13. Solid waste production: Meat scraps and packaging materials. Solid waste disposal method(s): Packaging materials are recycled or disposed of as municipal waste and the scrap metal is recycled.

14. Description of sample location: Large holding tank after pretreatment.

Sampling method/technique: Grab samples are taken at the large holding tank, but the wastewater is not agitated, so the samples are not representative. The facility has taken one grab sample – the City has not yet taken any samples.

15. Evaluation of self-monitoring data: ✔ Yes No NA

If yes, was self-monitoring adequate: Not determined.

The City permitted the facility as a zero-discharger in 2008, performed inspections, and collected manifests indicating the quantities of waste hauled away. A City inspector noticed on August 18, 2009 that the facility was actually discharging regulated and unregulated process wastewater from its various operations and ordered it to stop discharging. The City's attorney is considering enforcement options.

The City has never performed a water balance at this facility. The facility is incorrectly classified and its permit should be revised to reflect its proper classification.

During the site visit, there were about a dozen, mostly uncovered barrels and buckets in the wastewater treatment area filled with several hundred gallons of untreated wastewater. The inspectors observed that areas of the floor were wet and there were several large puddles. Facility representatives reported that the company that hauls off the treated wastewater has not come by as scheduled, so the wastewater (since the treatment cannot be used because the 1,200-gallon final holding tank is full) has been manually diverted into these temporary containers. The inspectors requested that the wastewater be stored in appropriate containers and properly contained. The facility representative agreed to order drums to store excess wastewater. In addition, the inspectors requested that the uncontained bottles of solvent be properly contained and that all containers be labeled.

Grab samples are taken at the large holding tank, but the wastewater is not agitated, so the samples are not representative. The inspectors reviewed the facility's sample results onsite and noticed that the metals were analyzed using a 6000 series method and mercury by method 7470, which are not approved methods for wastewater samples. The inspectors reminded the facility representative to ensure that sampling and analysis are conducted using approved methods.

The facility representative stated that his understanding of the zero-discharge certification that he has been submitting since 2008 (when the facility was permitted as a zero-discharger) was that no untreated wastewater was being discharged to the collection system. The representative stated that the facility had been permitted as a discharger in the 1980s, but could not remember why or when that permit was closed or expired.
SITE VISIT DATA SHEET

INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.

Name of industry: Xstrata Recycling, Inc.
Address of industry: 1695 Monterey Road, San Jose, CA 95112
Date of visit: 10/29/2009 Time of visit: 1:25 p.m.

Name of inspector(s):
Liz Tyson, City of San Jose Environmental Inspector
Sudhir Singh, City of San Jose Environmental Inspector
Anju Whig, City of San Jose Sanitary Engineer
Brenner Perryman, PG Environmental, LLC

Provide the name(s) and title(s) of industry representative(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone/Email</th>
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</thead>
<tbody>
<tr>
<td>Sejal Choksi</td>
<td>Environmental Engineer</td>
<td>(408) 998-4930</td>
</tr>
</tbody>
</table>

IU Permit Number: SJ-556Z Exp Date: 2/14/2013 IU Classification: Zero-Discharger 40 CFR Part 421

Inspection X Scheduled Unscheduled PCA
Type/Purpose X PCI New Company Complaint

Please provide the following documentation:

1. Nature of operation:
The facility is a recycling operation that processes electronic scrap materials to capture their precious metals.

2. Number of employees: 40 Number of shifts: 1 Hours of operation: 6:00 a.m.–4:30 p.m.; Mon–Fri

3. Water source: San Jose Water Company

4. Wastestream flow(s) discharged to the POTW:
The facility does not discharge industrial wastestreams to the POTW. All industrial wastestreams are collected and hauled off-site for disposal. The facility is permitted as a zero-discharger.

Sanitary: Not reviewed Process: Not applicable (NA) (gpd) Combined: NA (gpd)

5. Describe any significant changes in process or flow:
The facility is waiting for approval from the State’s Department of Toxic Substance Control (DTSC) to evaporate some of the facility’s cyanide solution.
6. Type of pretreatment system (Describe):
The facility does not have a pretreatment system because industrial waste is collected and hauled off-site for disposal. The liquid wastestreams collected for off-site disposal consists of spent cyanide stripping solutions and gold plating acid solutions.

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<th>Continuous flow</th>
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<td>NA</td>
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7. Condition/operation of pretreatment system (Describe): NA

Any unusual conditions or problems with the pretreatment system: NA

8. Process area description (identify raw materials and processes used):
The facility's general process begins by shredding electronic circuit boards down to less than 4 inches in diameter. The shredded material is then roasted in furnaces to derive a friable ash. The homogenized product is then sent to a ball mill, which grinds the ash and completely destroys even the smallest circuit chips. Screens then separate the fine dust from the coarse metallics. The coarse metallics are homogenized with copper in melting furnaces for sampling and analysis for precious metals. The metals are allowed to harden and are then sold on the market.

The facility also processes gold-plated parts. The part is dipped in a cyanide solution to strip the gold from the part. Zinc is added to help precipitate the gold out of the solution, producing a sludge-like residue. The cyanide solution is filtered to remove the zinc/gold sludge. The spent solution is pumped to a holding tank to be hauled off for removal. The sludge is melted in a furnace to retrieve the gold metal and zinc. The facility has a separate acid process area to process other metals. The acid process area has similar processes to precipitate metals from solution for recovery and sale.

9. Condition/operation of process area (Describe):
The process area was clean. The gold and cyanide processing area was clean and had a floor berm and dead sump to contain any spills.

Any unusual conditions or problems with the process area: No.

10. General housekeeping in process area (Describe):
The housekeeping inside the facility's processing area was acceptable; the area was clean. The housekeeping of the outdoor storage area (storage of shredded circuit boards) also appeared to be adequate.

Any unusual conditions or problems with general housekeeping in process area: No.
11. Chemical storage area (identify the chemicals that are maintained on-site and how they are stored):
Spent cyanide solution is pumped from drums into a storage tank for removal. The stored spent cyanide was labeled and within secondary containment away from acids.

| Any floor drains? | No | Any spill control measures? | Yes |

General housekeeping of chemical storage area (Describe): The chemical storage area was clean. No evidence of spills or leaks was observed.

13. Does the IU have hazardous waste manifests? Yes. See Notes section. Any problems associated with hazardous waste: No.

14. Solid waste production: Sludges from the cyanide and metals recovery processing areas.
Solid waste disposal method(s): Sludge from the cyanide and acid process areas is melted in furnaces.

15. Description of sample location: NA

Sampling method/technique: NA

16. Evaluation of self-monitoring data: | Yes | X | No | N/A
If yes, was self-monitoring adequate:

17. Who performs the self-monitoring analysis? NA

Notes:

- Hazardous waste manifests were reviewed as a component of this inspection. The most recent removal for both acid and cyanide wastes had occurred on October 5, 2009. The manifests documented that 900 gallons of acid and 4,055 gallons of cyanide were removed for disposal.

- The City inspector reviewed the facility’s requirement to submit its semiannual zero-discharge statement by the end of December 2009 with the facility representatives.

- The facility representative stated that particles from the furnace process are collected in a baghouse. The inspection team did not discuss or review the use of or disposal of wastewater generated from wet scrubbers. Although commonly used in processes such as those at the facility, the facility’s fact sheet does not mention the use of wet scrubbers. The inspection team recommends that the City discuss any usage of wet scrubbers with the facility. If wet scrubbers are used, the discussion should also include disposal practices of the wet scrubber wastewater.

- No deficiencies were observed during the inspection.