Attachment 2

Photos 1-3 taken by Chris Boykin, City of Union City on December 9, 2010
Storm water ponding due to drain cut at exit 12-9-10
Photograph Log for EPA’s December 3, 2010 Electrochem Solutions RCRA and CWA Inspection

All photographs on this log were taken with a digital camera by Amy C. Miller, RCRA Enforcement Office, EPA Region IX, except as noted. Please note that each photograph number begins with “PC030” and that the photograph log starts with photograph number 001.

001. Outdoor sign for Electrochem Solutions.

002. Production Room: All of the contents in the flammable cabinet are solvents used in the production process.

003. Production Room: Solid waste trash container. Contaminated gloves and wipes observed within the trash container. Note: staining on glove.

004. Main Wet Processing Area: Two unlabeled 55-gallon containers of used gold strip (cyanide).

005. Main Wet Processing Area: Six 55-gallon containers of gold strip (cyanide) including the two containers in the previous photograph. Four containers are labeled with the waste name and accumulation start dates.

006. Main Wet Processing Area: Unknown liquid in an open container under a table adjacent to the six 55-gallon containers in previous photograph.

007. Main Wet Processing Area: An open and un-secured container of gold strip (cyanide) product.

008. Main Wet Processing Area: Open and unlabeled container of silver tarnish solution waste.

009. Main Wet Processing Area: A 55-gallon container of tin waste. Note: the label is smudged and difficult to read.

010. Main Wet Processing Area: Unused 10-foot deep lined containment area. Note: liquid can be seen on surface of the liner.

011. Main Wet Processing Area: Unused 10-foot deep lined containment area. Note: tear in the liner.
012. Anodizing Area: Open 55-gallon container of nickel waste. The label has no accumulation start date.

013. Anodizing Area: Close up of label from previous photograph.

014. Anodizing Area: Overview shot of eleven 55-gallon containers of nickel, sulfamate, and hydrochloric acid waste.

015. Anodizing Area: Close up of the label for the hydrochloric acid 55-gallon container. Note: no accumulation start date or other required labeling information.

016. Anodizing Area: Open, cut top 55-gallon container labeled “water waste.” The label has no accumulation start date or other required labeling information.

017. Anodizing Area: Close up of the label on the 55-gallon container in the previous photograph.

018. Anodizing Area: Inside of trash can containing contaminated gloves.

019. Anodizing Area: Open and unlabeled cut 55-gallon container. Facility representative stated that it contained dichromate waste water.

020. Anodizing Area: Open cut top 55-gallon container labeled “rinse water.” Facility representative stated that it contained nitric acid and 40% nickel strip wastewater.

021. Anodizing Area: Seven 55-gallon containers. There is one product container, one nitric acid waste container, and five nickel waste containers. None of the waste containers had accumulation start dates or other required labeling information.

022. Anodizing Area: An open 5-gallon container of unknown substance.

023. Anodizing Area: Open cut top 55-gallon container labeled “waste water.” Facility representative stated it was placed in the location to collect rain water from a leak in the roof.

024. Utility Room: Nine 55-gallon containers of glycol product. Note: the bungs on two of the containers were open.

025. Utility Room: Leaking pipes.

026. Utility Room: Concrete under leaking pipes in previous photograph is corroded.

027. Water Treatment and Equipment Area: Three 55-gallon containers of cyanide solution waste with hazardous waste labels.
028. Water Treatment and Equipment Area: Close up of the hazardous waste label on one of three 55-gallon containers of cyanide solution in previous photograph. Note: 9/18/10 was the earliest accumulation start date on these three containers.

029. Water Treatment and Equipment Area: Overview of the area facing towards outdoor area. Note: three open and cut top 55-gallon containers in close proximity to the door, bypassing the sump.

030. Water Treatment and Equipment Area: Overview of the area with approximately eleven 55-gallon containers of waste.

031. Water Treatment and Equipment Area: Overview of the area facing towards the outdoor area. Note: four 55-gallon containers adjacent to wastewater treatment equipment. Two are open top.

032. Water Treatment and Equipment Area: An open top cut 55-gallon container with waste material.

033. Water Treatment and Equipment Area: Close up view of the three open and cut top 55 gallon containers in photograph 029.

034. Bulk Waste Processing Area: View of the area from the entryway from the Water Treatment and Equipment Area. Note: numerous containers are open and unlabeled.

035. Bulk Waste Processing Area: The roof corroded off this portion of the building.

036. Bulk Waste Processing Area: Six open top 55-gallon containers and one long rectangular container. One of the containers is labeled “sludge.”

037. Bulk Waste Processing Area: Two open top 55-gallon containers. One of the containers is labeled “water etch.”

038. Bulk Waste Processing Area: One open top 55-gallon container labeled “sludge.”

039. Bulk Waste Processing Area: Three open top 55-gallon containers placed near the fence, bypassing the sump and perimeter wall.

040. Bulk Waste Processing Area: Ten open top 55-gallon containers and one 5-gallon open container and one 5-gallon closed container.


042. Bulk Waste Processing Area: Liquid observed on the floor in the area. The floor is lined, although torn in some locations.

044. Bulk Waste Processing Area: Approximately seventeen open top 55-gallon containers. Note: liquid on the ground.

045. Bulk Waste Processing Area: An open top 5-gallon container. Note: liquid on the ground.


047. Bulk Waste Processing Area: Three open top 55-gallon containers, three open top 5-gallon containers and two closed 5-gallon containers.

048. Bulk Waste Processing Area: Open top bin with liquid inside.

049. Bulk Waste Processing Area: Open top containers of various sizes with liquid inside.


051. Bulk Waste Processing Area: Hazardous waste label on bin of F007 waste. The accumulation start date is 12/1/10.

052. Bulk Waste Processing Area: An open 55-gallon container with various unlabeled containers inside.

053. Bulk Waste Processing Area: Tank labeled “Nitric Waste Acid.”

054. Bulk Waste Processing Area: Three open 5-gallon containers. One container has an unknown liquid.

055. Outdoor Area: View from backside of the building.

056. Outdoor Area: Obsolete plating fixtures adjacent to trash bins.

057. Outdoor Area: Area immediately adjacent to the Water Treatment and Equipment Area. Note area slopes towards outdoor area. The area is wet from inside the building down to the DI water tanks.

058. Outdoor Area: storm drain approximately 30 feet from the back of the building.

059. Outdoor Area: View of storm drain in relationship to the building. Closest part of the building is the Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage).
060. Outdoor Area: View from the outdoor area the Water Treatment and Equipment Area, Bulk Waste Processing Area, and Maintenance Shop. Note puddle of liquid near forklift and Water Treatment and Equipment Area.

061. Outdoor Area: Empty container and debris behind storage trailer.

062. Outdoor Area: Open garbage bin with debris and open containers inside.

063. Outdoor Area: Open garbage bin behind storage trailers as seen in previous photograph.

064. Outdoor Area: Obsolete equipment and fixtures stored behind the storage trailers.

065. Outdoor Area: Shredded containers and other debris stored behind the storage trailers.

066. Outdoor Area: Metal parts and a 55-gallon container of scrap metal next to storage trailers.

067. Outdoor Area: Obsolete equipment and fixtures stored behind the storage trailers.

068. Outdoor Area: Obsolete process tank containing unknown liquid.

069. Outdoor Area: Discarded plating bath with unknown liquid inside.

070. Water Treatment and Equipment Area: Sample box and pH meter for sewer discharge.

071. Water Treatment and Equipment Area: Close up of pH meter. Note: the pH meter is not functioning.

072. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Areas is lined. There are approximately thirty 55-gallon containers and approximately two 5-gallon containers in the photograph. Containers along the short wall are open and labeled as “filters” and “liners.” The floor in this area is stained, but lined. Many labels on the containers could not be read. One container label in view reads “nickel strip” and another states “gold alodine.”

073. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Approximately forty 55-gallon containers and in some places triple stacked. A bin with a sheet of wood on top is located in the foreground.

074. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Approximately twenty-five 55-gallon containers. Many labels on the
containers could not be read. One container label in view states “nickel strip” and the other states “gold alodine.”

075. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): One hazardous waste label partially in view on one of the containers states “resin waste.”

076. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Slot drain located along entry to the storage area. Note that containers are stored on top of drain. Piping from rain gutter drains at the entry of the storage area. Note white-colored pavement from roof drain.

077. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Slot drain is full of liquid.

078. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): One of three 55-gallon container of cyanide waste filter label has an accumulation start date of 8/4/10.

079. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Another view of slot drain seen in photograph 077 full of liquid.

080. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): View of storm drain from the slot drain at the hazardous waste storage area.

081. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): One of three 55-gallon container of cyanide waste filter label has an accumulation start date of 8/4/10.

082. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): One of three 55-gallon container of cyanide waste filter label has an accumulation start date of 8/4/10. Note: the bung on the container is open.

083. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Another view of the triple stacked 55-gallon containers seen in photograph 073.

084. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): A label seen on one of the 55-gallon containers is faded and appears to have an accumulation start date of 1/19/09. Note: container is corroded (photograph taken by John Schofield).


087. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Label in view on the 55-gallon container, but picture is blurred. Note: the bird waste on container (photograph taken by John Schofield).

088. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Label in view on the 55-gallon container, but picture is blurred. Note: the bird waste on container (photograph taken by John Schofield).

089. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Same 55-gallon container in photograph 084. Note that the container has liquid on top and is corroded (photograph taken by John Schofield).

090. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): 55-gallon container is covered with bird waste. Label is smudged (photograph taken by John Schofield).

091. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Label on a 55-gallon container covered with bird waste. The label is blurred but the accumulation start date starts with 12/20 and states the material is “waste resin” (photograph taken by John Schofield).

092. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Same as photograph 075, a label on a 55-gallon container of hazardous waste is partially in view and states the material is “resin” (photograph taken by John Schofield).

093. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Same container as previous photograph (photograph taken by John Schofield).

094. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Label on 55 gallon container states material is “Bright Dip” (photograph taken by John Schofield).

095. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): The label on the 55-gallon container in photographs 075, 092, 093. The accumulation state date is 12/20/07 (photograph taken by John Schofield).

096. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Same as previous photograph (photograph taken by John Schofield).
097. Less than 90-day Hazardous Waste Accumulation Area (Waste Chemical Storage): Slot drain in middle of storage area is full of bird waste (*photograph taken by John Schofield*).

098. Maintenance Shop: Open 5-gallon container of unknown substance.

099. Maintenance Shop: Two 2-gallon containers labeled as “oil.”

100. Maintenance Shop: A 5-gallon container captures liquid from a machine.


102. Maintenance Shop: An open 5-gallon container of unknown material.

103. Maintenance Shop: Four 5-gallon open containers of product sand.


105. Maintenance Shop: Same as previous photograph.


108. Maintenance Shop: 2-gallon container labeled as “oil.” Same container in photograph 099.

109. Maintenance Shop: 2-gallon container labeled as “oil.” Same container in photograph 099.

110. Chemical Storage: Three 2-gallon old product containers. One label is faded. Another is written over with the words “Acid” and “Polish.”

111. Chemical Storage: Close up of one of the 2-gallon containers in the previous photograph.

112. Chemical Lab: Trash can containing contaminated gloves.

113. Chemical Lab: A 2-gallon unlabeled container of cyanide waste.

114. Chemical Lab: Various containers under the sink including two 2-gallon unlabeled containers of cyanide waste.

115. John Schofield monitoring pH levels in sewer sample box located in the Water Treatment and Equipment Area (*photograph taken by Chris Boykin*).
116. John Schofield monitoring pH levels in sample box located in the Water Treatment and Equipment Area (photograph taken by Chris Boykin).

117. John Schofield monitoring pH levels of evaporator liquid/solids from Evaporator Tank located in the Bulk Waste Processing Area. The pH monitoring was performed in the Water Treatment and Equipment Area (photograph taken by Chris Boykin).

118. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).

119. Photograph of tear in liner Bulk Waste Processing Area (photograph taken by Chris Boykin).

120. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).

121. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).

122. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).

123. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).


125. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).

126. John Schofield monitoring pH levels in hazardous waste treatment container located in the Bulk Waste Processing Area (photograph taken by Chris Boykin).
SUBSTANCE IDENTITY (Same as shown on SDS)

HEALTH
1 - Slight

FLAMMABILITY
0 - Minimal

REACTIVITY
2 - Moderate

4 - Severe
3 - Serious

NICKEL WASTE
Slight Mittimal

Health

Flammability

Reactivity

4 — Severe
3 — Serious
2 — Moderate
1 — Slight
0 — Minimal

Water Waste
HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
AND THE CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL

GENERATOR
ELECTROCHEM SOLUTIONS, INC. 32500 F007 131
CENTRAL AVENUE UNION CITY, CA
94587

WASTE CODES

PROPER D.O.T. SHIPPING NAME
UN1935 WASTE CYANIDE SOLUTIONS, N.O.S.
(CYANIDE PLATING RINSE WATER SOLUTION) 6.1
PGIII "TOXIC" ERG(157)

Profile 403089-00
CYANIDE DRAGOUT
Wet Code WAT20

PC030028
Bright Dip
Attachment 4

Excerpt from 2007 Tank Certification Report supplied by Electrochem Solutions, LLC on January 18, 2011
Main Area Containment

The containment assessment determined the following:

1. The liner that underlies the containers is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.

2. The base is appropriately sloped or the containment system is otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

3. The containment system has sufficient capacity to contain precipitation from at least a 24 hour, 25-year storm plus 10 of the aggregate volume of all containers or the volume of the largest container, whichever is greater. The system is not exposed to storms.

4. Run-on into the containment system is prevented or the collection system has sufficient excess capacity in addition to that required in (3) to contain any run on which might enter the system. The system is not exposed to run-on.

5. Procedures are documented and in force for the timely removal of spilled or leaked waste and accumulated precipitation as is necessary to prevent overflow of the collection system.

Comments

The Main Area floor is constructed of concrete, coated with epoxy and covered with a 1/8 inch polypropylene liner with sections heat fused together. The containment area was visually inspected and appeared to be free of cracks, gaps and in good condition. The containment tanks were visually inspected from the grated floor level approximately 5 1/2 feet above the containment floor and it appeared to be free of cracks, gaps and in good condition.

The containment system appeared to be installed and operated correctly.

The Main Area Containment is approximately 12' by 50' and 5 1/2' deep. The Main Area is connected with the Plating Area Containment which is 46' by 59' and is also located about 5' feet below the grated surface. Waste holding tanks, chemical storage tanks and plating tank ventilation are located within the Plating Area Containment. The total capacity of the grated area and tanks is approximately 126,636 gallons. The largest tank in the Containment Area is approximately 1,201 gallons. The total capacity of the tanks in this area is 47,052 gallons. The area must contain 10% of this total, 4,705 gallons, or the volume of the largest tank, whichever is greater. The area provides the required capacity. All tanks appeared to be surrounded by the liner. There is no storm water or run-on to deal with. Leaks can be observed and addressed. All secondary equipment is contained by the liner system.
## Main Storage Containment

### Tank Volumes

<table>
<thead>
<tr>
<th></th>
<th>Under Grate</th>
<th>Above Grate</th>
<th>Storage Tanks in Plating Room</th>
<th>Process Tanks 1</th>
<th>Process Tanks 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (Gallons)</td>
<td>6,500.00</td>
<td>3,500.00</td>
<td>3,000.00</td>
<td>4,484.00</td>
<td>29,508.00</td>
</tr>
<tr>
<td>Total Tanks</td>
<td>47,052.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Containment Volume

<table>
<thead>
<tr>
<th></th>
<th>Main Area</th>
<th>Plating Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side 1 (Ft)</td>
<td>50.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Side 2 (Ft)</td>
<td>12.00</td>
<td>46.00</td>
</tr>
<tr>
<td>Ht (Ft)</td>
<td>5.60</td>
<td>5.00</td>
</tr>
<tr>
<td>Volume (Cu Ft)</td>
<td>3,360.00</td>
<td>13,570.00</td>
</tr>
<tr>
<td>Gallons (7.48 gal/cu ft)</td>
<td>25,132.80</td>
<td>101,503.60</td>
</tr>
<tr>
<td>Total Containment</td>
<td>125,636.40</td>
<td></td>
</tr>
</tbody>
</table>

Tank volume in containment area that must be subtracted out:

<table>
<thead>
<tr>
<th></th>
<th>Under Grate</th>
<th>Plating Tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side 1 (Ft)</td>
<td>50.00</td>
<td></td>
</tr>
<tr>
<td>Side 2 (Ft)</td>
<td>12.00</td>
<td>3.33</td>
</tr>
<tr>
<td>Ht (Ft)</td>
<td>5.60</td>
<td>5.00</td>
</tr>
<tr>
<td>Volume (Cu Ft)</td>
<td>3,360.00</td>
<td>832.50</td>
</tr>
<tr>
<td>Gallons (7.48 gal/cu ft)</td>
<td>25,132.80</td>
<td>6,227.10</td>
</tr>
<tr>
<td>Total Volume Displaced</td>
<td>12,727.10</td>
<td></td>
</tr>
</tbody>
</table>

Total Gross Containment

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minuses</td>
<td>12,727.10</td>
</tr>
<tr>
<td>Net</td>
<td>113,909.30</td>
</tr>
</tbody>
</table>

10% rule

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest tank</td>
<td>1,000.00</td>
</tr>
<tr>
<td>Net Containment Requirement</td>
<td>4,705.20</td>
</tr>
<tr>
<td>Percent Capacity</td>
<td>2421%</td>
</tr>
</tbody>
</table>

Area has sufficient capacity
## Tanks in Treatment Area

<table>
<thead>
<tr>
<th>Name</th>
<th>Area</th>
<th>Nominal Capacity (Gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precipitator</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Sludge Press</td>
<td>Treatment Area</td>
<td>4 cubic feet</td>
</tr>
<tr>
<td>Sludge Press Effluent</td>
<td>Treatment Area</td>
<td>400</td>
</tr>
<tr>
<td>Waste Nitric</td>
<td>Treatment Area</td>
<td>1000</td>
</tr>
<tr>
<td>Waste HCl</td>
<td>Treatment Area</td>
<td>1000</td>
</tr>
<tr>
<td>Evaporator 1</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 2</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 3</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 4</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Portable Holding Tank</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Treatment Area</strong></td>
<td><strong>500</strong>*</td>
</tr>
</tbody>
</table>

### Capacity

<table>
<thead>
<tr>
<th>Tanks</th>
<th>400</th>
<th>400</th>
<th>400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,200.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Total Gross Containment**: 1,200.00
- **Minuses**: 0.00
- **Net**: 1,200.00

10% rule: 540.00
Largest tank: 1,000.00
Net Containment Requirement: 540.00
Percent Capacity: 120% >100%? TRUE

Area has sufficient capacity
Treatment Area Containment

The containment assessment determined the following:

1. The liner that underlies the containers is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
2. The base is appropriately sloped or the containment system is otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.
3. The containment system has sufficient capacity to contain precipitation from at least a 24-hour, 25-year storm plus 10 of the aggregate volume of all containers or the volume of the largest container, whichever is greater. The system is not exposed to storms.
4. Run on into the containment system is prevented or the collection system has sufficient excess capacity in addition to that required in (3) to contain any run on which might enter the system. The system is not exposed to run-on.
5. Procedures are documented and in force for the timely removal of spilled or leaked waste and accumulated precipitation as is necessary to prevent overflow of the collection system.

Comments

The Treatment Area floor is constructed of concrete, coated with epoxy and covered with a 1/8 inch polypropylene liner with sections heat fused together. The room has a grate situated at the east end of the room through which any liquid drains through into one of three holding tanks in the Main Containment Area. The containment area was visually inspected and appeared to be free of cracks, gaps and in good condition. The containment tanks were visually inspected from the grated floor level approximately 5 ½ feet above the containment floor and it appeared to be free of cracks, gaps and in good condition. The containment system appeared to be installed and operated correctly.

The grate is approximately 10' by 2 ½'. This drains into one of three holding tanks, each with a capacity of 400 gallons. The total capacity of the grated area and tanks is 1,249 gallons. The largest tank in the Treatment Area is 1,000 gallons. The total capacity of the tanks in this area is 5,400 gallons. The area must contain 10% of this total, 540 gallons, or the volume of the largest contain, whichever is greater. The area provides the required capacity. All tanks appeared to be surrounded by the liner. There is no storm water or run-on to deal with. Leaks can be observed and addressed. All secondary equipment is contained by the liner system.

The assessment was of a working, in place system. It does not include a review of the coating process or hidden features. Tanks and equipment were not moved to verify the integrity of the surface beneath the liner.
Datalab

then. Due to the nature of hazardous materials, hazardous wastes and the limited nature of this assessment, the containment system must be monitored and maintained on a routine basis.

Calculation sheets are attached.
## Tanks in Treatment Area

<table>
<thead>
<tr>
<th>Name</th>
<th>Area</th>
<th>Nominal Capacity (Gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precipitator</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Sludge Press</td>
<td>Treatment Area</td>
<td>4 cubic feet</td>
</tr>
<tr>
<td>Sludge Press Effluent</td>
<td>Treatment Area</td>
<td>400</td>
</tr>
<tr>
<td>Waste Nitric</td>
<td>Treatment Area</td>
<td>1000</td>
</tr>
<tr>
<td>Waste HCl</td>
<td>Treatment Area</td>
<td>1000</td>
</tr>
<tr>
<td>Evaporator 1</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 2</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 3</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 4</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Portable Holding Tank</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Treatment Area</strong></td>
<td><strong>5,400</strong></td>
</tr>
</tbody>
</table>

### Capacity

<table>
<thead>
<tr>
<th>Tanks</th>
<th>400</th>
<th>400</th>
<th>400</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1,200.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Gross Containment</td>
<td>1,200.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minuses</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net</strong></td>
<td>1,200.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 10% rule: 540.00
- Largest tank: 1,000.00
- Net Containment Requirement: 540.00
- Percent Capacity: 120% >100%? TRUE

Area has sufficient capacity
<table>
<thead>
<tr>
<th>Tank Identification</th>
<th>Location</th>
<th>Nominal Capacity (Gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH Adjustment</td>
<td>Below Grate</td>
<td>1000</td>
</tr>
<tr>
<td>Waste #1</td>
<td>Below Grate</td>
<td>400</td>
</tr>
<tr>
<td>Waste #2</td>
<td>Below Grate</td>
<td>400</td>
</tr>
<tr>
<td>Waste #3</td>
<td>Below Grate</td>
<td>400</td>
</tr>
<tr>
<td>Hydromatix Lift</td>
<td>Below Grate</td>
<td>200</td>
</tr>
<tr>
<td>Precipitator</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Sludge Press</td>
<td>Treatment Area</td>
<td>4 cubic feet</td>
</tr>
<tr>
<td>Sludge Press Effluent</td>
<td>Treatment Area</td>
<td>400</td>
</tr>
<tr>
<td>Waste Nitric</td>
<td>Treatment Area</td>
<td>1000</td>
</tr>
<tr>
<td>Waste HCl</td>
<td>Treatment Area</td>
<td>1000</td>
</tr>
<tr>
<td>Evaporator 1</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 2</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 3</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Evaporator 4</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
<tr>
<td>Portable Holding Tank</td>
<td>Treatment Area</td>
<td>500</td>
</tr>
</tbody>
</table>

Individual tank assessments are attached. The following statement applies to this entire report:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Timothy Lundell, PE. CIH