

	<div style="display: flex; align-items: center; justify-content: center;">  <div style="text-align: center; margin: 0 10px;"> <b>LESSON LEARNED</b> </div>  </div>	<b>Doc. No.:</b> <b>GP426 F39 Rev. 01</b>
<b>Hitachi Zosen Inova</b>		

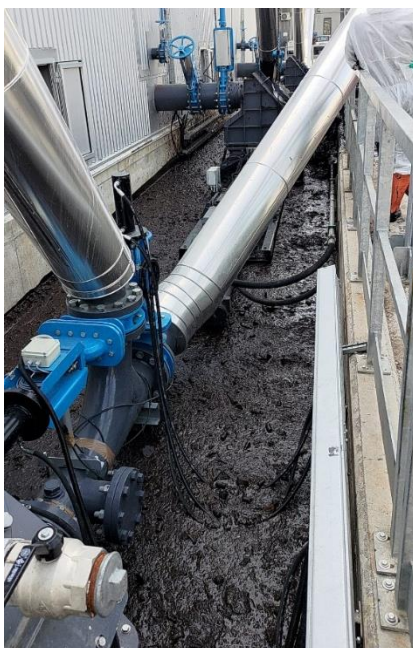
<b>Number</b>	2023-20	<b>Date of Issue</b>	20.09.2023
<b>Date of Incident</b>	17.07.2023	<b>Incident Classification</b>	Environmental Incident L1

**Summary:** On 17.07.2023, in one AD project in Italy, the discharge pump was blocked. Manual intervention was required to unblock the discharge system. On the day of the incident, an HZI Maintenance Manager was on site. However, he had to leave the site to assist with another project. After contacting the HZI Commissioning Manager, they both agreed that Industrial Projects ( a company already on site) could carry out the task following the procedure for emptying the hopper (HZI Doc No: 50182192). Before leaving the site, the Maintenance Manager closed one of the two DN400 main valves.

While carrying out the task, the operator, for unknown reasons, reopened the closed DN400 main valve and did not follow the procedure. As a result, the spill occurred when he opened the hopper cleaning flange. The operator then used the hydraulic manual pump to close the DN400 valve. He then informed HZI of the incident.


**Outcome:** The spilled digestate material was banded within the discharge basin and the spill didn't reach the ground. The spilled material was collected by a suction truck and disposed into the bunker.

**Pictures:**



<b>Root Causes and Contributory Factors</b>	<b>Lesson Learned</b>
<p>Root causes:</p> <ul style="list-style-type: none"> <li>• Procedure not followed</li> </ul> <p>Contributory factors:</p> <ul style="list-style-type: none"> <li>• HZI personnel not present on site</li> </ul>	<ul style="list-style-type: none"> <li>• For all repairing works in the discharge system ensure that HZI personnel is present on site.</li> <li>• Follow the relevant HZI procedures/method statements in detail.</li> <li>• Print the HZI procedures/method statements and use them as a checklist (check that each step was followed)</li> <li>• Apply LOTO as per AA42613 procedure</li> <li>• Implement a Permit to Work system as per AA42613 procedure</li> <li>• Modify the design of the DN 400 main valve covers to ensure that operators can visually confirm that the valves are closed.</li> </ul>

	<div data-bbox="571 91 718 203"></div> <div data-bbox="718 91 1007 203">LESSON LEARNED</div> <div data-bbox="1007 91 1158 203"></div>	Doc. No.: GP426 F39 Rev. 01
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	<ul style="list-style-type: none"><li>• Ensure that operating personnel received the relevant training</li></ul>	
	Every Lesson Learned is an opportunity to avoid recurrences. What have you done to avoid a similar incident on your project?	