|  |  |  |
| --- | --- | --- |
| **Asset Identifiers:** 22723\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Created by & Date:** Rick Davis, 8-17-2021\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Revised by & Date:**  | **Facility**:Ankeny Pump Station | **Asset Location**:Lower level drywell |
| **Asset Description:**Sewage Pump #5, Loop/Index500Pump with electric acuator |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SYMBOL** | **ENERGY TYPE** | **X** | **MAGNITUDE** |  | **SYMBOL** | **ENERGY TYPE** | **X** | **MAGNITUDE** |
| C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\8325A1BD.tmp | **Chemical** |  |  |  | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5561DF5F.tmp | **Electrical** | **X** | **Electrocution** |
|  | **Mechanical** | **X** | **Accidental Start up** |  | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5E800B1B.tmp | **Hydraulic** | **X** | **Engulfment** |
| Image result for thermal energy emoji | **Thermal** |  |  |  | Image result for pneumatic energy emoji | **Pneumatic** |  |  |
| C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\1B31F459.tmp | **RF Radiation** |  |  | Image result for graviational energy emoji | **Gravitational** |  |  |
|  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Check** | **Lockout Application Process** | **Check** | **Lockout Removal Process** |
|   |  Notify affected Personnel. |   | Ensure all tools and items have been removed. |
|   | Properly shut down unit. |   | Confirm all employees are safely located. |
|   | Isolate all energy sources. |   | Verify controls are in neutral. |
|   | Apply all lockout devices |   | Remove lockout devices and re-energize the unit. |
|   | Verify total de-energization of all sources. |   | Notify affected employees servicing is completed. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Energy**  | **Lockout Location**  | **Method** | **Type of Device** |
| **1** | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5561DF5F.tmp | MCC | Open breaker at MCC | Tree, tag, & lock |
| **2** | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5E800B1B.tmp | Suction valveLower level | Close valve at local control for actuator. When closed place selector in off position.  | Tree, tag, & lock |
| **3** | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5E800B1B.tmp | Discharge valveLower level | Close valve at local control for actuator. When closed place selector in off position. | Tree, tag, & lock |
| **4** | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5E800B1B.tmp | Seal water | Close seal water valve | Tag |
| **5** | C:\Users\deazleym\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5E800B1B.tmp | Drain valve | Open drain valve bleed off system pressure | N/A |