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| **Establishment:**  **S3IC No.:**  **Type of activity :**  **Status :**  Seveso high threshold  Seveso low threshold | **Date of inspection visit:**  **Type of inspection visit:**  Current  Thorough | **Name of inspector(s):** |
| **People met and function:**  **Controlled facilities:** | **Theme of the visit:**  National action 2018: Consideration of flood risk  **List of documents consulted:** | |
| **Reference documents :**  – prefectural decree of XXX , art icle XXX  – hazard study s of XXX, page XXX  **Useful documents:**  – national guide relating to the consideration of flooding on industrial sites  **Case of no responses from the operator:**  The operator is asked to specify whether to propose actions/reflections when he answers no to a question. | | |

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| **Introduction** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| Do technical requirements apply to the operator? | Yes No  Requirements from:  Prefectural decree  PPRI  Other : | **Findings:**  **Observation No:** |

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| **1- Characterization of the flood hazard** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| 1 – What type of flood risk is identified on the industrial site? | Overflow by slow flood  Overflow by flash flood  runoff  Marine submersion by overflow  Marine submersion by crossing  Hydraulic structure failure  Others : | **Findings:**  **Observation No:** |
| 2 – What reference documents did the operator use to characterize the flood hazard impacting the industrial site? What is the methodology used? | The information available on the industrial site comes from the following documents:  Approximate Envelope Potential Flood Maps (EAIP)  Territory at risk of flooding (TRI)  Flood risk prevention plan (PPRI)  Coastal risk prevention plan (PPRL)  Atlas of flood zones (AZI)  National mapping of territories vulnerable to coastal risks  Flood Historical Database (BDHI)  Flood marker database  Measurements taken on the industrial site by REX, internal maps  Hazard study relating to the hydraulic structure  Other :  The operator primarily used information from the following documents:  1:  2:  3: | **Findings:**  **Observation No:** |
| 3 – What are the characteristics of the hazard identified? | Reference flood (date and frequency of return):  Flow axis:  Height of Highest Known Water (PHEC):  Kinetics of the phenomenon:   * ascent and descent speed: * current speed: | **Findings:**  **Observation No:** |

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| **2- Feedback** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| 4 – Are flooding events recorded on the industrial site? | Yes No  How many ? | **Findings:**  **Observation No:** |
| Event date :  Event Features:  Consequences (direct (fire, explosion, toxic cloud) or indirect (discharges, pollution) and impact on the interests of L. 511-1 of the environmental code :  Actions implemented during the crisis:  Feedback from this event: | **Findings:**  **Observation No:** |

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| **3- Vulnerability of installations** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| 5 – Has the risk associated with flooding been studied by the operator as an initiating event? | The operator has studied the flood risk in its hazard study or in a specific study:  Yes No  If yes, the operator has:  Characterized the hazard impacting its establishment  Describes possible associated potential accidents  Analyzed the vulnerability of existing installations  Identified the preventive measures to be implemented  Identified the protective measures to be implemented  Identified and analyzed accidentology and reviewed lessons learned | **Findings:**  **Observation No:** |
| 6 – How did the licensee identify vulnerable industrial equipment? | The operator considered:  All property facilities  All classified installations  Classified installations falling under the following headings:  Facilities using substances covered by the following hazard statements:  Waste storage facilities  Radioactive sources and waste  The facilities concerned by a major accident identified in the EDD  Utilities  Risk control measures (RMM)  Mobile installations (wagons/tank trucks transporting hazardous substances)  Other :  No installation  To identify this sensitive equipment, the operator has adopted the following methodology:  Has a prioritization of the equipment to be protected been carried out?  Yes No  How ? | **Findings:**  **Observation No:** |

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| **4- Hazard monitoring** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| 7 – How does the operator detect the hazard? | The operator uses the following information channel:  Vigicrue website (vigicrue map, monitoring bulletins, subscription to a station's measurement flow?)  Vigicrues Flash  France weather website (vigilance map and monitoring bulletin)  Surveillance and alert system of the municipality or other actor (agreement?)  Flood Forecasting Service (SPC)  Information given by public authorities (town hall/prefecture)  Information given by the media  Information given by a service provider  Special information agreement  Internal measuring device on site  Visual detection, surveillance round on the site  No detection system  Link with structure manager (dam break for example)  Other : | **Findings:**  **Observation No:** |
| 8 – How does the operator follow the evolution of the hazard? | The operator monitors the evolution of the rising waters via:  Monitoring of the aforementioned information channel  No monitoring system  Does the operator keep a record of this development?  Yes No | **Findings:**  **Observation No:** |

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| **5- Crisis management** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| 9 – Does the ORSEC plan or the PPI provide for a flood crisis management component involving the industrialist? | Yes No  If so, what are the measures that apply to the manufacturer?:  –  **–** | **Findings:**  **Observation No:** |
| 10 – Does the organization set up on the site allow the operator  to adjust its crisis management in order to ensure the safety of its facilities for a flood greater than the 100-year flood? | Yes No  If yes, how is it organised?  –  **–** | **Findings:**  **Observation No:** |
| 11 – How is the internal alert system defined? | The alert system set up by the operator consists of:  A pre-alert phase initiated at the water level:  An alert phase triggered at the water level:  The end of the alert considered at the water level:  If pre-alert, this phase consists of:  Follow the evolution of the natural phenomenon  Ensure that the necessary resources (human and material) are operational if the alert threshold is reached  Other :  The alert phase may consist of:  Implement the internal operation plan  Call the site's on-call duty  Evacuate staff  Securing sensitive equipment  Up-to-the-minute information (town hall? prefecture? residents? media? etc.)  Other : | **Findings:**  **Observation No:** |
| 12 – Should access to the site be maintained? | Yes No  Can the site be made inaccessible in the event of a crisis?  Yes No Don't know  If yes :  For the evacuation of personnel  Yes No  To ensure access to on-call duty  Yes No  To ensure access to external firefighters (SDIS)  Yes No | **Findings:**  **Observation No:** |
| 13 – How is crisis management formalized? | Crisis management is formalized via:  Installation fallback procedures  Procedure specific to the risk of flooding?  Yes No  Internal operation plan procedures  Organizational measures reflex sheets  Monitoring sheets for the evolution of the hazard  Setting up a crisis unit  Other :  Do these procedures provide for progressive and graduated actions depending on the progress of the crisis?  Yes No | **Findings:**  **Observation No:** |
| 14 – What safety actions should be implemented during the alert? | The security actions to be implemented during the crisis are:  Provisional containment  Sealing building openings  Securement of mobile capacities  Moving bulk storage (drums, IBCs, big bags, etc.)  Installation elevation  Stopping an installation in production  Draining an installation  Management of arrivals and departures of tanks / wagons  Utilities shut down  Shutdown of the aqueous discharge treatment station  Pumping  Disposal of hazardous substances  Management of floating objects  External material deliveries (generators, etc.)  Other : | **Findings:**  **Observation No:** |
| 15 – What is the time required to implement all the planned security actions? | Time to secure the industrial site including the mobilization of human and material resources:  During business hours:  Outside business hours:  Is this time compatible with the kinetics of rising waters?  Yes No Don't know  Was this safety time checked during an exercise?  Yes No  Has this lockout time been verified during an actual flood event?  Yes No | **Findings:**  **Observation No:** |
| 16 – Is a possible control/maintenance phase of the installations planned before restarting the activity? | Yes No  How is this phase formalized (procedure, checklist, etc.)?  Are MMRs checked before reboot?  Yes No | **Findings:**  **Observation No:** |
| 17 – What technical measures are in place? (or planned) | The technical measures implemented are:  Storage anchoring  Tank/wagon anchor  building locking system  Breakwater/cofferdam  Other :  Cost of these measures:  How was the dimensioning/effectiveness of these measures assessed (mechanical resistance to flooding, etc.)?  Is the effectiveness of these measures subject to checks/tests?  Yes No  Is the aging (corrosion, etc.) of these devices taken into account?  Yes No Not applicable | **Findings:**  **Observation No:** |
| 18 – Are organizational measures in place? | The planned organizational measures are:  –  –  Are the utilities necessary for the fallback of the installations available during the crisis?  Yes No  Are the evacuations of substances/equipment off the site compatible with the reduced access implemented by the municipality (consistency with the municipal safeguard plan)?  Yes No Not applicable  Are staff trained (including through regular drills) to implement these organizational measures?  Yes No Training/qualification not required  What personnel can be mobilized?  During business hours:  Direction  Penalty  Operation  Subcontractors  All  Outside business hours:  Direction  Penalty  Operation  Subcontractors  All  Does the implementation of these measures require specific skills?  Yes No  Is the use of external resources necessary to implement these measures?  Yes No | **Findings:**  **Observation No:** |

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| **6- On-site control** | | |
| **Issues** | **Operator responses** | **Findings and Observations** |
| 19 – Are the technical requirements respected? | Field checks:  Yes No Not applicable | **Findings:**  **Observation No:** |
| 20 – Are the technical measures properly implemented? | Yes No | **Findings:**  **Observation No:** |
| 21 – Are the organizational measures well implemented? | Yes No | **Findings:**  **Observation No:** |