**For Activities Involving the Use of Infectious and Potentially Infectious Agents/Materials and Biological Toxins**

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| **IBBC reg. no :**  **Name of PI :** |

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| **WORK INVENTORY FORM** | | | |
| **Project Name:** |  | **Conducted By:**  **Date:** |  |
| **Name of Biological Agent:** | Velogenic Newcastle Disease Virus (VVNDV) |
| **Complete address where work will**  **be performed:**  **(Specify the Building, Block & Floor)** |  | **Reviewed and**  **Approved By:**  **Date:** |  |

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| **No** | **Work Process** | **Act No** | **Work Activities** |
| 1 | Determination of Velogenic Newcastle Disease virus titer in chicken embryonated eggs | 1.1 | Propagation of the Velogenic NDV virus |
|  |  | 1.2 | Titration of the Velogenic NDV virus |
| 2 | Determination of Velogenic NDV viral load | 2.1 | RNA extraction |
|  |  | 2.2 | Real time PCR analysis |
| 3 | Pathogenicity study of Velogenic NDV in SPF chicken | 3.1 | Inoculation of Velogenic NDV via oronasal group |
|  |  | 3.2 | Necropsy |
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\* Based on objective of the study

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| **Biological Risk Assessment Form (Activity-Based)** | | | | | | | | | | | | | | |
| **Laboratory:** | |  | | | | | | **Conducted By:**  **Date:** | |  | | | | |
| **Work Process:** | | 1. Determination of Velogenic Newcastle Disease virus titer in chicken embryonated eggs | | | | | | **Reviewed and Approved By:**  **Date:** | |  | | | | |
| **Act No** | **Hazard/Threat**  **Identification** | | **Risk Evaluation** | | | | | **Risk Control & Mitigation** | | | | | | |
| **Likelihood Score** | | **Severity Score** | | **Risk Level Score**  **(L x S)** | **Proposed Risk Controls** | **(L)** | | **(S)** | **Final Risk Level Score**  **(L x S** | **Person-in-Charge** | **Remarks** |
| **Activities** | | **Likelihood of exposure or Possible Injury/ ill-Health** | **(L)** | **Consequence** | **(S)** |
| 1.1 | Propagation of the Velogenic NDV virus | | Likely  (Needle prick/ exposure to mucous membrane/ Spillage : Infection to human causing conjunctivitis) | 4 | Minor | 2 | 8 (Medium) | 1.Perform work in proper containment (in BSL 2 and work in BSC class II)  2.Proper PPE  3.Follow SOP  4.Training of the personnel | 2 (unlikely) | | 2 (minor) | 4 (Low) |  |  |
| 1.2 | Titration of the VVNDV virus | | Likely  (Needle prick/ exposure to mucous membrane/Spillage : Infection to human causing conjunctivitis) | 4 | Minor | 2 | 8 (Medium) | 1.Perform work in proper containment (in BSL 2 and work in BSC class II)  2.Proper PPE  3.Follow SOP  4.Training of the personnel | 2 (unlikely) | | 2 (minor) | 4 (Low) |  |  |

**Note: (S) Severity** **(L) Likelihood**

**Refer to the scoring & Risk Matrix**

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| **Biological Risk Assessment Form (Activity-Based)** | | | | | | | | | | | | | | |
| **Laboratory:** | |  | | | | | | **Conducted By:**  **Date:** | |  | | | | |
| **Work Process:** | | 1. Determination of Velogenic NDV viral load eggs | | | | | | **Reviewed and Approved By:**  **Date:** | |  | | | | |
| **Act No** | **Hazard/Threat**  **Identification** | | **Risk Evaluation** | | | | | **Risk Control & Mitigation** | | | | | | |
| **Likelihood Score** | | **Severity Score** | | **Risk Level Score**  **(L x S)** | **Proposed Risk Controls** | **(L)** | | **(S)** | **Final Risk Level Score**  **(S x L)** | **Person-in-Charge** | **Remarks** |
| **Activities** | | **Possible Injury/ ill-Health** | **(L)** | **Consequence** | **(S)** |
| 2.1 | RNA extraction | | Likely  (Needle prick/ exposure to mucous membrane/Spillage : Infection to human causing conjunctivitis) | 4 | Minor | 2 | 8 (Medium) | 1.Perform work in proper containment (in BSL 2 and work in BSC class II)  2.Proper PPE  3.Follow SOP  4.Training of personnel | 2 (unlikely) | | 2 (minor) | 4 (Low) |  |  |

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| 2.2 | Real time PCR analysis | Unlikely | 2 | Minor | 2 | 4 (Low ) | 1.Perform work in proper containment (in BSL 2 and work in BSC class II)  2.Proper PPE  3.Follow SOP  4.Training of personnel | 2 (unlikely) | 2 (minor) | 4 (Low) |  |  |

**Note: (S) Severity** **(L) Likelihood**

**Refer to the scoring & Risk Matrix**

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| **Biological Risk Assessment Form (Activity-Based)** | | | | | | | | | | | | | | |
| **Laboratory:** | |  | | | | | | **Conducted By:**  **Date:** | |  | | | | |
| **Work Process:** | | 3.Pathogenicity Study of Velogenic NDV in SPF chicken | | | | | | **Reviewed and Approved By:**  **Date:** | |  | | | | |
| **Act No** | **Hazard/Threat**  **Identification** | | **Risk Evaluation** | | | | | **Risk Control & Mitigation** | | | | | | |
| **Likelihood Score Severity Score** | |  | | **Risk Level Score**  **(Lx S)** | **Proposed Risk Controls** | **(L)** | | **(S)** | **Final Risk Level Score**  **(S x L)** | **Person-in-Charge** | **Remarks** |
| **Activities** | | **Possible Injury/ ill-Health** | **(L)** | **Consequence** | **(S)** |
| 3.1 | Inoculation of Velogenic NDV via oronasal group to experimental group | | Likely  (Needle prick/ exposure to mucous membrane : Infection to human causing conjunctivitis) | 4 | Minor | 2 | 8 (Medium) | 1.Perform work in proper containment (in BSL 2 and work in BSC class II)  2.Proper PPE  3.Follow SOP  4.Training of personnel | 2 (unlikely) | | 2 (minor) | 4 (Low) |  |  |

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|  |  | Almost certain (Infection to other chicken that not involved in the experiment) | 5 | Catastrophic | 5 | 25 (High) | 1.Perform work in proper animal facility -ABSL2  2.Proper PPE  3.Follow SOP  4.Training of personnel | 2 (unlikely) | 3(moderate) | 6(medium) |  |  |
| 3.2 | Necropsy | Likely  (Needle prick/ exposure to mucous membrane : Infection to human causing conjunctivitis) | 4 | Minor | 2 | 8 (Medium) | 1.Perform work in proper containment (in BSL 2 and work in BSC class II)  2.Proper PPE  3.Follow SOP  4.Training of personnel | 2 (unlikely) | 2 (minor) | 4 (Low) |  |  |

**Note: (S) Severity** **(L) Likelihood**

**Refer to the scoring & Risk Matrix**

**Signature and stamp of PI: Date:**

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| **FOR IBBC OFFICIAL USE ONLY**  **Remarks by Institutional Biosafety & Biosecurity Committee:**  **Signature of IBBC Chairman: Date:** |