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# Instructions for

# **Obtaining Work Authorization Permits**

#### **REVISION**

| Rev<br>No. | DCN No. | Change Summary   | DCN<br>Initiator | Document<br>Owner |
|------------|---------|--|------------------|-------------------|
| 36         | DCN3236 | Substantial updates and edits throughout the procedure. Also updated the example form in Appendix B and phone numbers in Appendix C. |                  | J. Melino         |

Prior revision history, if applicable, is available from the Document Control Office.

#### 1. PURPOSE

The purpose of this document is to ensure work activities at the Albany NanoTech Complex (ANC) are:

- Communicated and coordinated with all affected parties (i.e., tenants, departments, etc.).
- Communicated and coordinated with Facilities.
- Performed in accordance with NY CREATES Environmental, Health, and Safety (EHS) policies.

#### 2. SCOPE

- 2.1 Work Authorization Permit (WAP) (**CFM-00004-F1**) must be completed when any of the following situations apply:
  - Work activities performed within the facility will directly impact the facility or facility operations.
  - Work activities performed outside the facility will directly impact the facility or facility operations.
  - Work activities performed within or outside the facility will <u>NOT</u> impact the facility but involve the application, inspection, installation, maintenance, removal, repair or replacement of devices, equipment, goods, materials or services.

Exceptions to this are routine work activities performed by contractors or vendors. This would include work such as waste collection, chemical delivery, and facility equipment preventive maintenance (e.g., elevators, air compressors, chillers, etc.). This also includes work by contractors or vendors taking place in the cleanrooms (fab and subfab) on cleanroom tools and/or related support equipment.

However, contractors and vendors are still obligated to comply with site safety and procedural requirements including but not limited to hazard assessments (PPE assessments), Hot Work Permits, Daily Fire Protection Permits, etc.

- 2.2 Reference Appendix A Work Authorization Permit System Flow Chart to determine if the work activity requires a WAP.
- 2.3 These work instructions apply to all employees, tenant employees, contractors and sub-contractors that are engaged in work activities at the ANC.

- 2.4 These work instructions do NOT apply to construction activities that shall be performed outside the facility that will not directly impact the facility or facility operations.
- 2.5 If a work activity occurs such that it requires building occupants to be evacuated or displaced during the work or if the work severely impacts the daily processes of those in that area, every effort should be made to schedule the work during off-hours (after 5 pm or before 7 am) or on weekends.

#### 3. **DEFINITIONS**

- 3.1 **Company**: The company or group performing the work.
- 3.2 **Notifications**: Notifications and communications associated with the work taking place that include or should include all affected areas, tenants, parties and employees. This may include but not be limited to those listed in the "Notifications" section of the permit, or others listed in "Additional Conditions / Concerns" section.
- 3.3 Personal Protective Equipment (PPE) Assessment: A document that identifies the PPE required in a task or process by defining the hazards and risks associated. For more information, see EHS-000010 Workplace Hazard Assessment and Personal Protective Equipment Selection Form.
- 3.4 **Requestor**: The person performing and/or directly overseeing the work listed on the permit.
- 3.5 **System Owner Authorization**: Required by signature of the System Owner whenever a new system is installed in an existing facility, or an existing system is expanded or modified. For a listing of System Owners see **FEI-00003 Facilities Resource Responsibility Matrix for Facilities System Owners**.
- 3.6 **Urgent Situation**: A situation requiring immediate action or attention. Includes, but is not limited to, utility outages, work to restore equipment redundancy, and cleanroom "tool down" situations.
- 3.7 **Work Activity**: Activities involving the application, inspection, installation, maintenance, removal, repair or replacement of devices, equipment, goods, materials or services.
- 3.8 **Work Sponsor**: The person or group the work is being performed for firm and name to be listed on the permit. This person must be a NY CREATES employee or tenant employee.

#### 4. RESPONSIBILITIES

- 4.1 Compliance with this procedure is the responsibility of the party responsible for the Work Activity either the Requestor or the Work Sponsor.
- 4.2 Work Sponsors and Requestors are responsible for submitting WAPs in a timely manner to allow for permit processing, notifications, and coordination with impacted parties. This includes any potential required site-wide notifications.
- 4.3 Work Sponsors are to obtain a FEG Project Number and initials from the assigned FEG Project Manager prior to submitting related WAPs for approval.
- All approval signature parties shall be available to sign the WAPs daily. In the event that such parties are unavailable, they must designate a back-up signature party to sign such permits in their absence. See Appendix C Work Authorization Permit Sign Off Matrix for names and contact information.

#### 5. ASSOCIATED DOCUMENTS

- 5.1 **FEI-00025** SOP for Facility Modifications Procedure
- 5.2 **FEI-00025-F1** Design Review Checklist
- 5.3 **FEI-00025-F2** Final Inspection Checklist
- 5.4 **FEI-00025-F3** Construction Permit Application
- 5.5 **FEI-00025-F4** Code Compliance Review Checklist Part 1 and Part 2
- 5.6 **FEI-00025-F5** Worksheet A Structural Design

#### 6. PROCEDURE

- The permit form shall not be modified (e.g., addition of contractor logo, etc.).
- A Work Authorization Permit shall be completed and submitted three (3) business days prior to the scheduled start of the work. This is to allow sufficient time to determine potential impacts of work activities and coordinate them with the appropriate parties.
- 6.3 Permits may not be submitted the same day as the start of the work. Exceptions to this will be made on a case by case basis for urgent situations.
- A permit for work that is considered necessary, due to an urgent situation, will be processed the same day the permit is submitted in order to expedite the work. Expediting permits in this manner will be done at the discretion of the permit signatories and shall not diminish the requestor's responsibility to schedule and coordinate work activities. This includes applicable subpermits (i.e., daily fire protection permits), to prevent impact to facility operations and adherence to safety protocols.
- In addition to a WAP, the Requestor shall attach all applicable sub-permits and/or a PPE Assessment or equivalent (Hazard Assessment) depending on the type of work being performed. See Appendix A Work Authorization Permit System Flow Chart for details on this process.
- A WAP must be submitted for <u>each</u> trade or type of work. (A General Contractor performing a renovation cannot submit one (1) WAP to cover fire protection, electrical and plumbing work. Each trade / contractor requires their own WAP.)

Reference Appendix B – Work Authorization Permit Instructional Form for clarification on how to complete the form as indicated in the following sections.

Each section of the WAP form is listed below in order as they appear on the form – from top to bottom.

# 6.7 **Extending Permits**

If the permit being completed is an extension to an existing permit, the box at the top left of the form must be checked.

#### 6.8 **FEG Project # and PM Initials**

If the permit being completed is related to a facility modification or FEG (Facilities Engineering Group) project, the FEG Project number must be inserted, and the applicable FEG Project Manager (PM) must initial the permit manually (pen and ink) prior to submission.

#### 6.9 Weekend Work

If the work is occurring over a weekend, the "Weekend Work" box must be checked.

#### 6.10 Requestor Information

Lists information for those on site performing the work, NOT those in remote "office" positions.

- Requestor: The person on site performing or directly overseeing the work.
- Cell Phone #: The cell phone number of the Requestor. Not an office number.
- Company: The employer of the Requestor.
- Work Sponsor: The person the work is being performed for. Include the company or firm name. This person MUST be a NY CREATES or TENANT employee (e.g. CSR, IBM, TEL, AMAT, etc.).
- Start Date / Time: The anticipated start date and time of the work.
- End Date / Time: The anticipated end date and time of the work. The
  duration of work on a WAP cannot exceed seven (7) calendar days\*.
   If the duration exceeds seven (7) days, a new permit must be
  submitted 'extending' the original permit.

NOTE: WAPs for long duration "Tool Install" activities may be approved for periods up to thirty (30) days, at discretion of the signatories.

- Bldg. / Location: Must include the name or abbreviation of the building (e.g. NFN, NFX, etc.).
- Level / Rms: The floor and/or room number where the work is taking place.

#### 6.11 Work Information

List detailed information about the work.

- Work Summary: One complete sentence providing an overview of the work. Not just one or two words. Listing the project name is helpful (for example, "Renovation of the Nano Lab" or "NY CREATES office space expansion"). Work related to tool install must include a Tool HEX ID.
- Tools / Equip. Affected: List the tools or related equipment affected by the work. If more space is required, attach a list.
- Systems Affected: List utilities or systems impacted by the work.
- Duration of the work: List the length of time to complete the work.
   Work may only take three (3) days over the period of a week.
- Possible Alarms: List alarm systems which could be affected, such as TGMS, Fire Alarm, etc.
- Description of Work: Do NOT duplicate the Work Summary above.
  List a description of the work tasks to be completed during this WAP
  work period (within Start / End dates). (Examples include
  "Mechanical system demolition", "Installation of He, N2 and O2
  piping", "Patching, prep and painting work".)
- Precautions: List precautions taken to prevent impact to people, equipment, and systems.

#### 6.12 **Notifications**

Indicate departments or groups to be contacted and advised of the work. Also, indicate the types of announcements to be made to inform the those who could potentially be impacted by the work.

Notifications are the responsibility of the Requestor.

#### 6.13 **Department / Group Notifications**

Notifications shall take place in two (2) phases: the initial notification shall be not less than seven (7) business days in advance of the work, and the second notification shall be not less than two (2) business days (48 hours) in advance of the work.

- Odor-Producing work: Ensure that all occupants of the building and potential adjacent buildings are made aware of the work by posting notifications signs. For full details and an Odor Notification Sign Template refer to EHS-00073 Odor Notification Procedure. If there is a potential for widespread impact, schedule a site-wide communication to potentially impact parties.
- Noise (Sound)-Producing work: Ensure that all occupants of the building and potential adjacent buildings are aware of the work. Prior to the work, schedule a site-wide communication to the occupants of the impacted areas.
- Waste-Generating work: Contact EHS if not general trash or routine waste. For types of waste, refer to EHS-0009 – Hazardous Waste Management or contact EHS directly <u>sunypolyehs@sunypoly.edu</u>

## 6.14 Required Attachments

Work Activity involving any of the tasks described below shall have the following sub-permit and approval forms attached to the WAP form. **NOTE**: The applicable sections of all permits and forms must be completed at the time of submission.

- 6.14.1 <u>Hot Work Permit:</u> Submit **EHS-00029-F1 Daily Hot Work Permit** if the Work Activity includes the need to perform any welding, cutting, blasting, brazing, or soldering.
- 6.14.2 Confined Space Entry Permit: Submit EHS-00007-F1 Confined Space Entry Permit if the Work Activity involves entry into a permit-required confined space (refer to Section 3.0 of EHS-00007 Confined Space Entry Procedure for clarification).
- 6.14.3 Energized Electrical Safety Permit: Submit EHS-00054-F1 Energized Electrical Safety Permit if the Work Activity involves the need to perform work on live / energized electrical equipment (refer to Section 9.0 of EHS 000054 Electrical Safety Program Procedure for clarification).

- 6.14.4 PPE Assessment: If any of the above work tasks that require completion of a WAP require additional Personal Protective Equipment (PPE) beyond the use of a hard hat, safety glasses, and/or leather gloves, a Hazard Assessment (HA) and PPE Selection Form (EHS-00010-F1) must be completed and attached to the Work Authorization Permit.
- 6.14.5 <u>Scaffolding Permit</u>: Submit **EHS-00074-F1 Scaffolding Permit** if any kind of scaffolding will be erected, altered, or dismantled on site. One permit needs to be submitted for each week that the scaffold is erect.
- 6.14.6 <u>Crane Work Permit</u>: Submit **EHS-00040-F1 Crane Work Permit** if the Work Activity involves use of a crane on site.
- 6.14.7 TGMS Modification Sub-Permit: Submit **CFM-00008-F1 TGMS Modification Sub-Permit** if the work activity involves modification of an existing certified and operational TGMS system, or system component.
- 6.14.8 <u>Design Review Checklist</u>: If the Work Activity involves the need to alter or modify any exits or means of egress, or any changes or modifications to life safety, HVAC, utility, or plumbing devices. See **FEI-00025 SOP for Facility Modifications Requests** for more information.
- 6.14.9 <u>Dirty Work Permit Application</u>: Submit **CFM-01005-F1 Dirty Work Permit Application** if the Work Activity might involve the need to create any additional particulates in any of the cleanroom environments.
- 6.14.10 <u>Fire Protection System Daily Permit</u>: Submit **CFM-00005-F1 Fire Protection System Daily Permit** anytime work activities within the facility have the potential to affect the fire alarm system and its components; this includes testing, modification, and maintenance of the fire system. In addition, submit this form when any work activities carried out indoors or outdoors (alleys, rooftops, near air intakes, etc.) will affect the fire protection systems with hot work, dust generation, smoke generation, etc.
- 6.14.11 IT Network Modification: Submit an IT Help Desk Ticket if the work activity involves modification (moves, adds, changes, and configuration changes) to the existing IT network. In turn, IT will create a Help Desk ticket so the System Owner can make the requested changes. Help Desk tickets can be obtained by emailing cnsehelp@sunypoly.edu.
- 6.14.12 Non-Routine Hazardous Work Permit: Submit EHS-00062-F1 Non-Routine Hazardous Work Permit to perform a non-routine task, experiment or unplanned maintenance that involves Hazardous Process Materials (HPMs).

- 6.14.13 <u>Dig-Safely Clearance</u>: Required when excavations shall be performed on site, to demonstrate that the area has been cleared to perform the excavation.
- 6.14.14 Power-Actuated Fastener Tool Permit: Submit EHS-00065-F1 Power-Actuated Fastener Tool Permit if the Work Activity involves use of these tools on site.
- 6.14.15 Non-Hazardous Gas Line Break Sub-Permit: Submit CFM-00011-F1 Non-Hazardous Gas Line Break Sub-Permit when work activities within the facility require breaking any of the "identified" (see CFM-00011) non-hazardous gas connections on existing lines.
- 6.14.16 Floor Tile Removal Approval Form: Submit EHS-00031-F1 Floor Tile Removal Approval Form if the Work Activity involves the need to remove cleanroom floor tiles.
- 6.14.17 Other: If necessary, other submissions or back-up documentation that must be attached to the Work Authorization Permit include:
  - Approved Building Permits: Required for modifications made to the building or its associated infrastructure (for details, reference: FEI-00025-F3 – Construction Permit Application.
  - Approved "Red-Lined" Piping and Instrumentation Drawings (P&IDs): Required for utility changes or tool modifications.
  - Work Plans: Required to explain activities that are not normally performed on site.
- 6.14.18 <u>Additional Conditions / Concerns:</u> Leave blank. To be completed by permit approvers who may provide additional directions, request additional required sub-permits, request additional approvals, etc.
- 6.14.19 <u>System Owner Authorization:</u> System Owner authorization may be required due to a new system is installation, existing system modification, expansion, etc.
- 6.15 All sub-permits or work activities that require additional sign-off and support from affected departments must be scheduled three days prior to the event. The employee who has agreed to support this activity must also sign off on the Work Authorization Permit to confirm their availability. The EHS department does not support work performed on Friday nights or over weekends unless planned in advance.
- 6.16 Two (2) copies of the WAP form shall be submitted along with two (2) copies of all sub-permits and two (2) copies of all attachments.

- 6.17 WAPs shall be submitted via the 'drop box' mounted to the wall outside CESTM room CR-1 before 8:00am Monday through Friday.
- 6.18 Permits will be reviewed at the daily permit meeting held in CESTM, Rm. CR-1 from 8:30am to 9:00am, Monday through Friday. Note: Permit meetings will not take place on most Federal holidays.
- WAPs containing all necessary approval signatures shall be stamped "approved". One (1) approved permit shall be returned to the requestor and one (1) approved permit shall be kept by the Facilities Operations Group (FOG) for record.
- 6.20 Approved permits shall be placed on the bottom shelf of the drop box located outside CESTM room CR-1 for pick up in the future. The requestor is responsible for picking up their copy of the approved permits.
- Requestors are required to promptly retrieve Work Permits so they can:
  - a) Confirm they have been approved and work can proceed.
  - b) Be made aware of any 'Additional Conditions/Concerns' added to the WAP that may be required as part of the work.
- The requestor shall have a copy of the approved permit and sub-permit available for review upon request by NY CREATES representatives (e.g., EHS, FOG, etc.) at the work site location.
- The following sub-permit forms must be completed by the requestor and approved by the Emergency Response Team (ERT) staff prior to the start of work:
  - 1) Confined Space Entry
  - 2) Crane Lifts
  - 3) Hot Work
  - 4) Power-Actuated Fastener Tool
  - 5) Scaffolding

To obtain this approval, ERT must be contacted by calling Security at 518-437-8600.

6.24 A Work Authorization Sign-Off Matrix is provided for reference in Appendix C. This lists the names of those who can sign off for various areas of responsibility.

- WAPs shall be in effect for a one (1) week period. For work lasting more than one (1) week, WAPs must be resubmitted as an extension to an existing permit and re-approved. The WAP form shall be modified to accurately reflect the ongoing work (change in scope, dates, etc.), the checkbox in the upper left-hand corner of the form checked ("Check to Extend an Existing Permit") and the form submitted for approval.
- 6.26 Security shall review work permit activities to ensure they are coordinated with the Facility's Events calendar. Work considered to impact or interfere with events may not be approved and will need to be rescheduled.

## 7. RECORDS

Copies of "approved" WAPs will be kept by the Facilities Operations Group. Hard copies will be kept for three (3) months in a file cabinet in CESTM room B220. Soft copies will be kept indefinitely at the following file location:

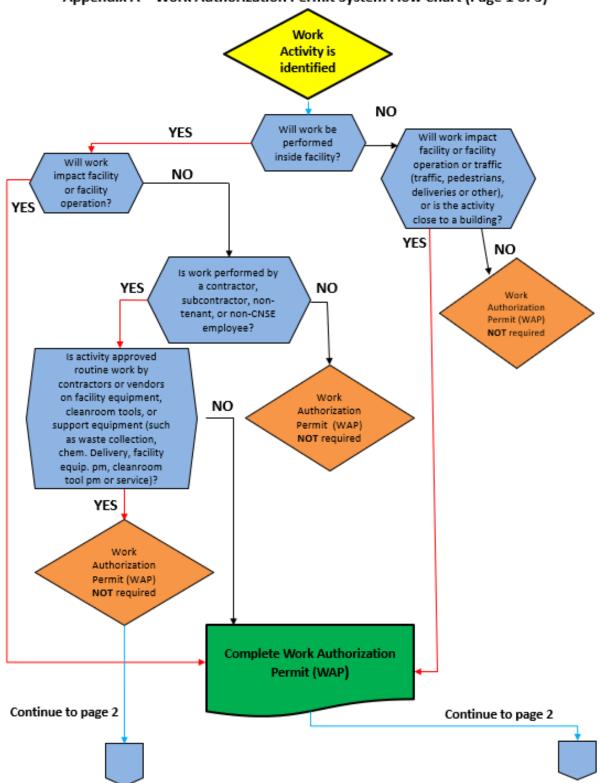
V:\CNSE Construction\Work Authorization Permits

#### 8. VIOLATION

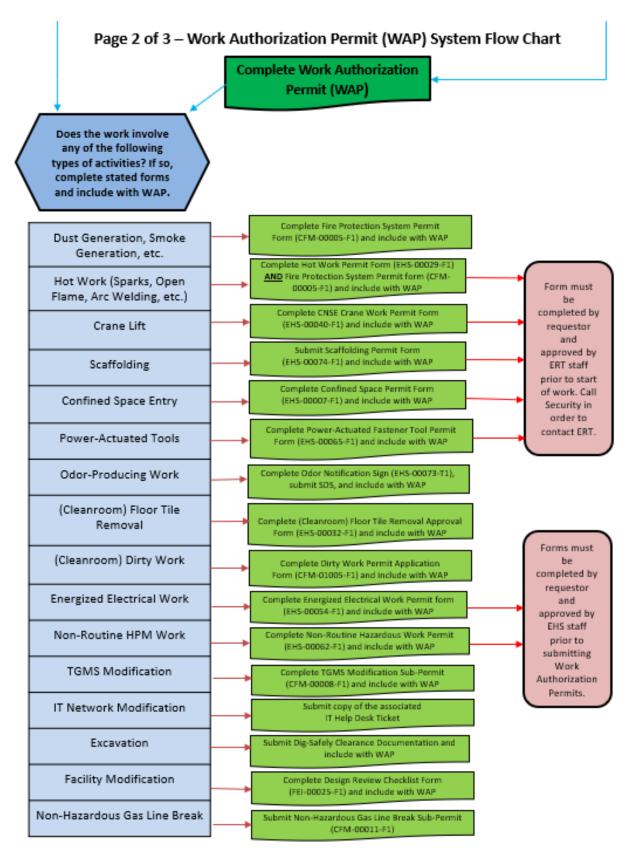
- 8.1 If any employee, tenant employee, contractor or sub-contractor chooses to disregard or violate any of the instructions provided in this procedure, such parties must submit in writing the reason for violating this protocol, and have such reasoning approved by all signature parties.
- 8.2 If any employee, tenant employee, contractor or sub-contractor violates this protocol three (3) or more times, their badges will be revoked, and they must re-apply for badge access to the site.

#### 9. APPENDIX

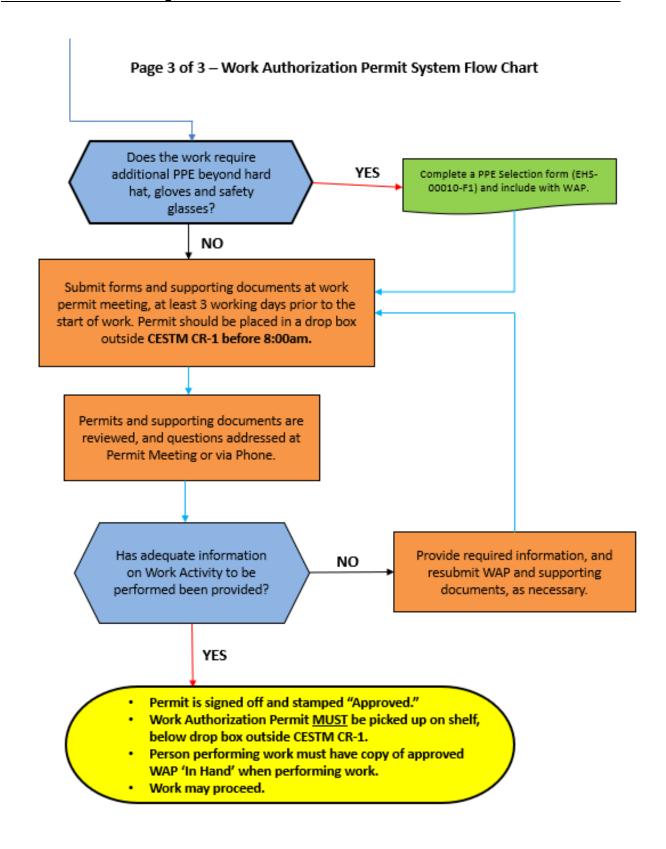
- 9.1 Appendix A Work Authorization Permit System Flow Chart
- 9.2 Appendix B Work Authorization Permit Instructional Form
- 9.3 Appendix C Work Authorization Permit Sign-Off Matrix



Appendix A – Work Authorization Permit System Flow Chart (Page 1 of 3)



Continue to page 3



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# Appendix B – Work Authorization Permit Instructional Form (See CFM-00004-F1 for Actual Blank Work Authorization Permit)

| <b>ØNY</b> CRE   | EATES  | WORK A   | JINORIZ  | A HON PE  | RIVII I          | Form Number/Rev #<br>CFM-00004-F1 R29 |  |  |
|--|--|--|--|---|------------------|---------------------------------------|--|--|
| Extend an Existing P   | Permit FEG   | Project #:   | FEG  | 6 PM Initials:                                      | Ide              | entify Weekend Work                   |  |  |
| Requestor Information  | n  |  |  |   |                  |                                       |  |  |
| Requestor: Person on site performing the work Phone #: Requestor's cell # Date: Time:  Company: Company/group performing work (i.e., subcontractors, not contractors)  Date: Time: |  |  |  |   |                  |                                       |  |  |
| Work Sponsor Who w   |  | ed for, firm and name  |  |   | (1 week maxin    | Level & ALL R                         |  |  |
| NY CREATES Contact   |  | TERMIT employee.   | Locatio  | ni. Diag. N   | airie Levei/i    | uiis. #5 Ui Aleas                     |  |  |
| Emergency Phone # and ER1  |  |  | 618-437-8817   |   |                  | 618-968-7082 (Offic                   |  |  |
| (618) 487-4<br>Work Information  | \$800  | Facilities: Joel Me  | lino 618-688-8170  | (Cell) Fire Sys                                     | tems: Erin Comme | rford 518-221-4345 (Cell)             |  |  |
| Work Summary:  |  | scription of work to<br>project name or too  |  |   | etail to unders  | tand what is being                    |  |  |
| Tools/Equip. Affected:   | Cleanroom tools  | and/or equipment a   | affected by the  | work.   |                  |                                       |  |  |
| Systems Affected:  | System affected  | by the work.   |  |   |                  |                                       |  |  |
| Ouration of Work:  | Anticipated durat  | tion of the work (e.g  | j., 4 hours).  |   |                  |                                       |  |  |
| ossible Alarms:  | Alarms that will b   | e or could be affec  | ted.   |   |                  |                                       |  |  |
| Description of Work:   | Description of wh  | hat the work will en   | tail.  |   |                  |                                       |  |  |
| recautions:  | ons:  Precautions taken to prevent impact to people, equipment, facilities, and systems. |  |  |   |                  |                                       |  |  |
| Notifications:   | Security E   | HS/ERT HVAC  | WWT/UPW/   | BG Electrical                                       | Air Liquide      | Shipping / Receiving                  |  |  |
| Provide representative<br>nitials.)  | Odor Producing No  | otice Noise Produc   | ing Notice   | Waste Generation                                    | Evacuation       |                                       |  |  |
| Required Attachments:  | ☐ Hot Work* ☐ E  | Fire Protection  | Energized Ele  | ect. Work**   | Assessment       | Scaffolding*                          |  |  |
| Requires ERT Approval<br>Prior to Start of Work  | Crane Lifts**  | TGMS Modification  | Design Revie   | w Checklist   | Dirty Work       | Confined Space Entry*                 |  |  |
| Requires EHS Approval Prior to I tart of Work  | ☐ IT Network Modificat   | tion Non-Routine H   | azardous Work**  | Dig Safely NY C                                     | learance Pov     | er-Actuated Fastener Tool*            |  |  |
|  | ■ Non-Hazardous Gas Line Break   |  |  |   |                  |                                       |  |  |
| Do No  |  | Line – FOR NY CR   |  |   | Vrite Below Thi  | s Line                                |  |  |
| Additional Conditions / Concerns   |  |  |  |   |                  |                                       |  |  |
| System Owner<br>Authorization  | Name:  |  |  | Name:   |                  | Initials:                             |  |  |
| tutionization [  |  |  | Initials:  | Ivallie.  |                  |                                       |  |  |
|  |  |  | Initials:  | Ivairie.  |                  | Rejected                              |  |  |
| Job Start Sign-On  |  | See Work Authoriza   |  |   | Date:            |                                       |  |  |
| lob Start Sign-On acility Representative:  | e:   | See Work Authoriza   | tion Permit Sig  | n Off Matrix  | Date:            |                                       |  |  |
| Job Start Sign-On<br>Facility Representative:<br>Fire Systems Representative   | re:  |  | tion Permit Sig  | n Off Matrix<br>n Off Matrix                        | -                |                                       |  |  |
| Job Start Sign-On Facility Representative: Fire Systems Representative: Safety Representative:   |  | See Work Authoriza   | ation Permit Signation Permit Signation Permit Signation Permit Signation                        | n Off Matrix<br>n Off Matrix<br>n Off Matrix        | Date:            |                                       |  |  |
| Job Start Sign-On Facility Representative: Fire Systems Representative Safety Representative: CSR Cleanroom Representative VY CREATES Cleanroom Re                                 | ative:   | See Work Authoriza<br>See Work Authoriza<br>See Work Authoriza<br>See Work Authoriza | ution Permit Sig<br>ution Permit Sig<br>ution Permit Sig<br>ution Permit Sig<br>ution Permit Sig | n Off Matrix n Off Matrix n Off Matrix              | Date:            |                                       |  |  |
| Job Start Sign-On Facility Representative: Fire Systems Representative: Safety Representative: CSR Cleanroom Representa  | ative:   | See Work Authoriza<br>See Work Authoriza<br>See Work Authoriza                       | ation Permit Sig<br>ation Permit Sig<br>ation Permit Sig   | n Off Matrix n Off Matrix n Off Matrix n Off Matrix | Date: Date:      |                                       |  |  |

NY CREATES Confidential When Completed

DCN3237

## **Appendix C – Work Authorization Permit Sign Off Matrix**

Revised 4/23/24

| Area of Responsibility                          | Primary          | Contact #    | Secondary               | Contact #    | Tertiary         | Contact #    |
|---|------------------|--------------|-------------------------|--------------|------------------|--------------|
| NY CREATES Facility Representative              | Joel Melino      | 518-588-9170 | Pat O'Dea               | 518-281-7487 | Gary Funck       | 518-588-7026 |
| NY CREATES Fire Systems Representative          | Erin Commerford  | 518-221-4345 | Joe Kosakowski          | 518-491-5445 | Jim Blanchard    | 518-925-2763 |
| NY CREATES Safety Representative                | Glenn Matteson   | 518-225-9241 | Priscilla<br>LaFountain | 518-728-3241 | Darren Brookhart | 518-364-4345 |
| CSR Cleanroom Representative                    | Bob Young        | 518-813-6785 | Jeff Dittmar            | 518-364-2376 | Nick Granuzzo    | 845-380-0651 |
| NY CREATES Cleanroom Representative             | Justin Metzger   | 518-320-5965 | Dustin Murphy           | 518-795-7326 | Ray Michael      | 518-320-7946 |
| A-L (Air Liquide) Representative                | John DeRusso     | 518-860-0426 | Kirsten Johnson         | 518-414-9601 | Lucas Mitchum    | 838-250-7838 |
| TEL (Tokyo Electron) Representative             | Don Kinsey       | 518-435-5445 | Jimmi<br>Godlewski      | 518-424-2625 | Mike Harding     | n/a          |
| LAM Representative                              | Stefano Gazzelli | 407-758-0187 | Steve Ellinger          | 802-233-0645 | n/a              | n/a          |
| NY CREATES EE / AIM Photonics<br>Representative | Steve Shaw       | 518-925-9454 | Andrew Peters           | 518-925-8979 | n/a              | n/a          |
| NY CREATES IT Representative                    | Ralph Gartner    | 518-852-2398 | n/a                     | n/a          | n/a              | n/a          |
| AMAT Representative                             | Emily Abplanalp  | 512-962-5112 | Chris Nickerson         | 518-223-3296 | Lee Wishart      | 518-742-6921 |

NOTE: Individual 'system owner' signature may be required as well.

See FEI-00003 - Facilities Resource Responsibility Matrix for Facilities System Owners for system owners.