#### **Cleanroom Work Protocol**

#### 1. General

- 1.1. Before entering the cleanroom, each user must:
  - 1.1.1. Be instructed by the cleanroom staff about the following topics:
    - 1.1.1.1. Risks in the cleanroom.
    - 1.1.1.2. Properties of gases that are used in the cleanroom.
    - 1.1.1.3. What to do in case of an unusual event in the cleanroom.
    - 1.1.1.4. What to do in case of emergency in the cleanroom.
  - 1.1.2. Complete a computerized chemical safety training (students should sign up for a course, workers will receive a link). A certificate must be provided by the student every year.
- 1.2. The user must sign a declaration in which he commits he has fulfilled steps 1.1.1-2 and read the document "Cleanroom Work Protocol".
- 1.3. After working hours another knowledgeable person who has received safety training must be within range of seeing the person or hearing the person and be able to respond to any emergency.
- 1.4. Working hours: Sun-Thu, 08:00-20:00. If you wish to work outside the working hours, please refer to section 15.

#### 2. **Safety**

2.1. All Fab users who witness a safety violation must report it to the Fab management immediately. The report must include date, time, place, and names of the people involved and a detailed description of the safety violation.

- 2.2. A user who does not follow section 2.1 endangers his wellbeing and health, and the wellbeing and health of other Fab users.
- 2.3. A user that will not follow section 2.1 will not be allowed in the Fab.
- 2.4. Users who will not follow this protocol will be banned from work at the nanofabrication center for two weeks, after which they will require a retraining in general safety and in specific equipment usage as needed.

# 3. Cleanroom attire

- 3.1. Full length pants
- 3.2. Closed, impermeable shoes preferably leather (no sandals or shoes made of cloth material are allowed)
- 3.3. Cleanroom suit
- 3.4. Safety glasses
- 3.5. Beard net
- 3.6. Hair net
- 3.7. Shoe Covers
- 3.8. Gloves
- 3.9. Eye contact lenses are not allowed.

### 4. What you cannot bring into the cleanroom

- 4.1. Food and drinks.
- 4.2. Paper not suitable for use in the cleanroom.
- 4.3. Cardboard boxes of any kind and size.
- 4.4. Pencils that are not suitable for use in the cleanroom
- 4.5. Any other object that is not suitable for use in the cleanroom
- 4.6. New materials that have not been preapproved by Fab administration and safety department.

#### 5. **Entering the cleanroom:**

- 5.1. Before entering the cleanroom, sign in the BookItLab program (section 7). Entrance and work inside the Fab are not allowed without a reservation (this includes co-workers, users who only observe the process, etc.) or approval in advance.
- 5.2. Swipe your entrance sticker in the entrance: sticker must be swiped on the reader each time you enter and exit, even if you are accompanying another user.
- 5.3. Dress up: wear shoe covers, gloves, hair net, beard net and cleanroom suit.

#### 6. Using Tools and Equipment

- 6.1. Before use of any equipment, one must complete training and become a certified user. For training protocol refer to section 8.
- 6.2. Before entering the cleanroom, sign in the BookItLab program (section 7). Entrance and work inside the Fab are not allowed without a reservation.
- 6.3. All new processes must be authorized and approved by the FAB's staff. For new process approval protocol, refer to section 9.
- 6.4. Users should always make sure their area is clean before they begin to work. If it is not clean, the user must notify the NFC staff immediately.
- 6.5. Basic instructions for using the BookItLab program installed on tools' computers:
  - 6.5.1. After the computer is turned on, a BookItLab window is opened. Enter your BGU username and password.
  - 6.5.2. If you did not make a reservation, the system will not allow you to use the tool. Do not attempt to open the tool's application without logging into BookItLab.

- 6.5.3. After logging in, click Activate Service to turn on the application.
- 6.5.4. At the end of your session:
  - 6.5.4.1. Turn off the application.
  - 6.5.4.2. Click LOGOFF in the BookItLab system
- 6.6. The username and password for logging into the BOOKIT system are private. Only the person who has booked the tool can use it. It is not allowed to use a tool with another user's login credentials.
- 6.7. Each tool has a short manual next to it, in a visible place.
- 6.8. After use, fill in the required information in the logbook.
- 6.9. The nanofabrication center is not responsible for the success/ calibration of a process performed independently.
- 6.10. For any problem with the tool, contact a staff member immediately. Do not attempt to solve the problem on your own.
- 6.11. Debit cancellation:
  - 6.11.1. Possible only in case of a malfunction that was reported and diagnosed during a process.
  - 6.11.2. Debit cancellation is not possible in case of an unsuccessful process that was done using functioning systems.
  - 6.11.3. Cancellation request should be done within 48 hours from the malfunction identification. Debit cancellation due to malfunction will not be authorized after receiving the monthly billing.
- 6.12. If you intend to leave your sample overnight in a machine (e.g., for vacuum), and work in the morning:
  - 6.12.1. Receive permission and coordinate with NFC staff.

- 6.12.2. Make a reservation for all the period the machine will be unavailable and stay logged in the Bookit program until the machine is available again.
- 6.12.3. Pick up the sample as early as possible the next morning.
- 6.12.4. Send an email to BGU coordinator with the dates and hours of the actual work done. The charge will be for these hours.
- 6.13. Users should always make sure that their work area is clean before they leave. Users should thoroughly clean and dry the area they have used, along with any labware, tools or equipment. No tool parts, lab equipment or chemicals should be placed on tools.
- 6.14. Users who have not used a tool for more than a few months will not be allowed to work independently. The user is required to consult the NFC staff regarding any updates in the tool's status and new working guidelines and be recertified to work independently.

### 7. **Booking equipment**

- 7.1. Booking equipment is done using the BookItLab program.
- 7.2. You must reserve every tool you intend to use, even if you work on several tools in parallel.
- 7.3. There is a minimal usage time for each tool.
- 7.4. Cancellation or change of reservations must be made before the reserved session, and no less than the period set in Bookit for each piece of equipment. Otherwise, special permission is required to alter a reservation.
- 7.5. If you wish to join a co-worker in the cleanroom, you must book "co-worker" in the program. This option is only for training with your coworker. Otherwise, use the "cleanroom use" option.

- 7.6. To use the BookItLab program:
  - 7.6.1. One must be registered in the BookItLab system. If you are not registered, you will receive a form to fill in.
  - 7.6.2. You will be allowed to work in the cleanroom only after receiving approval of your registration.
  - 7.6.3. Make a reservation in the calendar of the tool.
  - 7.6.4. Make sure your status is approved before the beginning of your session.

#### 8. Training

- 8.1. Hands-on training and certification will be done only by the Fab staff.
- 8.2. Training steps:
  - 8.2.1. Basic training- on a defined training program based on an example process/ analysis etc.
  - 8.2.2. If required- advanced training on the student's process.
  - 8.2.3. In case a process/ analysis is required urgently (before the basic training), the student can join the fabricator as a coworker, but the work will not include training.
  - 8.2.4. User will be escorted by a fabricator until the fabricator decides the user is able to work independently.
- 8.3. Certification is only for working hours. Night work is allowed only after the user has gained work experience and with BGU coordinator's permission. For night work instructions, refer to section 10.
- 8.4. When training with your co-workers, you are not allowed to use the tools. You can only observe your co-workers and learn from them. In addition, the user is not allowed to use other clean room facilities and tools during the time of the training.

8.5. Training with a co-worker requires BookItLab reservation (as co-worker). In this case, there is an entrance fee of 20回. You need to let the fab's staff know you intend to train with a co-worker.

### 9. New process approval

Before beginning work with any new process which includes:

- a. Processes that the student was not trained to perform and was not certified by the center's staff/ approved by the center's staff in advance.
- b. Substrate material that was not supplied by the center's staff (including new coatings, layers, or any other modification on top of the substrate).
- c. New chemicals

#### The following steps are required of the research group:

- 9.1. Submit a work paper that includes the following details:
  - 9.1.1. Complete protocol of the process (including equipment, amounts, reactions, etc.)
  - 9.1.2. Names of the students that will perform the process.
  - 9.1.3. Risk assessment (energy released, materials released, etc.).
  - 9.1.4. Risk handling.
  - 9.1.5. Necessary protective equipment.
  - 9.1.6. Waste disposal (container type, container handling after disposal, etc.).
- 9.2. The protocol in section 9.1 must be authorized by the safety advisor of the university.
- 9.3. The student must receive training and instructions regarding the process he intends to perform. The researcher should submit a certification that the student has received the training.
- 9.4. Read the SDS of each material.

### 10. Using Chemicals

- 10.1. All new processes must be authorized and approved by the FAB's staff.
- 10.2. Materials' inventory:
  - 10.2.1. The nanofabrication center is obligated to have valid chemicals in stock for general nanofabrication use.
  - 10.2.2. The center can provide materials based on an existing inventory.
  - 10.2.3. The users will be charged for the use of expensive materials, such as photoresists, gold, platinum, etc.
  - 10.2.4. If there is a specific material that the researcher requires, it is the researchers' responsibility to purchase it. In this case, the center allows to keep the material in the FAB (if the instructions of using new material are followed).
  - 10.3. Ordering and using chemicals:
    - 10.3.1. For safety reasons, independent users do not have access to most materials in the fab, such as acids/bases, photoresists, etc.
    - 10.3.2. If you wish to work with a specific chemical, you need to coordinate it with BGU coordinator:
      - 10.3.2.1. For liquids (e.g., photoresists) at least 3 working days in advance (before Thursday). The material will be ready on the next Tuesday.
      - 10.3.2.2. For deposition materials you need inside the chamber- two working days in advance.
    - 10.3.3. If you deposit gold or platinum, fill the layer thickness in the Bookit reservation, and send an email to BGU coordinator with the metal layer thickness.

- 10.4. If you wish to use a chemical that we do not have in stock, you need to receive approval from BGU coordinator in advance to bring your own material. See section 9 for instructions.
- 10.5. Before using any chemical, the user should read the SDS and have a complete understanding of the chemicals he intends to use in the hoods and tools. In each lab there is a folder of SDS for materials that are used in that lab.
- 10.6. Before using any chemical, the user is responsible for checking the name and the expiration date of the chemical.
- 10.7. Wear closed working shoes, safety glasses and suitable gloves. Check the SDSs for suitable glove for the chemicals you're working with, or consult your supervisor.
- 10.8. When working with acids and bases, wear apron, extra pair of suitable gloves and face mask.
- 10.9. Work with hazardous materials should only be done in the fume hood. If you wish to work outside the hood with analytical equipment or diluted solution, you should get permission from the lab manager.
- 10.10. Bottles and containers must be always closed, except for when removing materials from them. Do not try to open a container forcefully.
- 10.11. Hazardous materials should be moved across the lab only using a suitable cart, plastic bucket that is suitable for carrying a single bottle, or a suitable cooler.
- 10.12. Bottles and containers with chemicals should be placed at least 10 cm from the edge of the working surface. Make sure that they are stable.
- 10.13. When working, put your name and phone number in your work area. Write down the names of the materials that are in your work area.

- 10.14. If you encountered an unknown material in the hood, on the floor or in any other place, notify one of the center's workers immediately.
- 10.15. During acid dilution, always add acid to water.
- 10.16. After use, seal the chemical's container and return it to its original location. Chemicals should not be stored in the fume hood, on equipment, carts, floor, etc.
- 10.17. Incompatible chemicals should be stored separately.
- 10.18. Store only minimal amount of the materials that you need to use that day in the hood/ workstation.
- 10.19. Make sure that each container with chemical is labeled with the material's name and hazard.
- 10.20. Liquid hazardous materials will be stored in exhausted chemical cabinets (i.e., under the hood). Solid materials should be stored in appropriate cabinets.
- 10.21. Materials of different hazard classes should be stored separately, to prevent a chemical reaction. Take special care in separating between flammable materials and oxidizing and corrosive materials as well as acids and bases.
- 10.22. Check your cleanroom gown. If it is contaminated, send it for cleaning.
- 10.23. Any small chemical spill should be cleaned immediately.

  Notify all people who work in the room with you. Use Trivorex to absorb and neutralize the liquid. Use respirator as needed.

# 11. Work in a chemical hood

#### 11.1. General:

11.1.1. Make sure that the hood is in order, and that its test is valid (written on a sticker attached to the hood).

- 11.1.2. The hood should be tested at least once a year by the maintenance department.
- 11.1.3. If the hood is not in order, do not work with hazardous materials in it.

#### 11.2. Proper use of the hood:

- 11.2.1. All work involved in releasing pollutants to the air should be done in the hood.
- 11.2.2. All equipment and chemicals should be placed 10cm from the edge of the hood to prevent turbulences.
- 11.2.3. Do not block the rear exhaust openings that are used for gas/vapors removal from the hood.
- 11.2.4. Do not block the front holes. They are part of the air flow system.
- 11.2.5. Place only the chemicals and equipment that are necessary for your current work.
- 11.2.6. Remove any ignition source when working with flammable liquids or gases.
- 11.2.7. Do not place light objects such as wipes, gloves etc., in the hood. They may be sucked and clog the exhaust openings. When you finish using a wipe, put it in the dedicated bin or take it out of the hood.
- 11.2.8. Unnecessary chemicals and equipment should not be stored in the hood. Only materials and equipment that are used continuously should be placed in the hood.

#### 12. Waste treatment

- 12.1. No chemical should be thrown in the sink.
- 12.2. Chemical waste should be collected in dedicated containers.
  The containers should be marked clearly with the type of waste.
  They should be tightly sealed, except for when liquids are

- poured into them, or due to special circumstances, that were approved by the safety department.
- 12.3. Different material types should be stored separately, to prevent violent chemical reaction between incompatible materials.
- 12.4. Disposal of piranha solution:
  - 12.4.1. Manually prepared solution: solution should be diluted by 50%, and then disposed in a separate container. The cup of the container should **not** be tightly sealed, and the container must be inspected for pressure buildup every 2-3 days. In case of pressure buildup, the container must be depressurized by opening it inside the fume hood.
  - 12.4.2. Solution from HMXsquare automatic system: The waste is already diluted. It is collected in 10L canisters that are 80% full and the cap is not tightly sealed, to avoid pressure buildup.

Waste Type	Container Type
Acidic liquid	*Suitable bottle/container
Basic liquid	*Suitable bottle/container
Organic Liquid	*Suitable bottle/container
Organic acid	*Suitable bottle/container
Contaminated Tips	Plastic Container
Sharps- contaminated	Plastic container/ two plastic bags in a cardboard box
Sharps- not contaminated	Two plastic bags in a cardboard box
Solid waste (papers, etc.)- contaminated	Paper bag inside a container in the Hood
Solid waste (papers, etc.)- not contaminated	Waste Bin

<sup>\*</sup> The waste container should be of a material compatible with the waste you intend to collect.

No liquid waste should be placed in the contaminated solid waste bag!

# 12.5. Empty bottles:

- 12.5.1. Volatile materials should be evaporated in the hood. The bottle should be washed twice with water and thrown into non-contaminated waste bin (without capping it).
- 12.5.2. Non-volatile materials: the bottle/container should be emptied completely, washed twice with water, and thrown into non-contaminated waste bin (without capping it).

#### 12.6. Waste clearing:

- 12.6.1. Do not overfill waste bags and containers. They should only be filled 3/4 of their volume.
- 12.6.2. When the container/ waste bin is 3/4 full, notify the NFC staff. Only NFC staff is allowed to prepare containers for waste.

### Only closed waste containers can be taken out of the hood!

#### 13. Gases in the cleanroom

In several processes done in the cleanroom, gases are used. There are several types of gases, with various risks. Some of the gases are hazardous. They can be toxic, corrosive, pyrophoric, flammable, oxidizing etc. The gas system is equipped with sensors and alarms in case of a leak (for details refer to section 16).

# 14. Finish working and exiting the cleanroom:

- 14.1. Logoff from BookItLab
- 14.2. Clear any waste, materials, equipment pieces, labware, etc. that you have used.
- 14.3. Clean all surfaces, labware, tools and equipment you have used.
- 14.4. Remove contaminated extra gloves in the dedicated waste bin.
- 14.5. Exiting the cleanroom (in the gowning room):
  - 14.5.1. Remove cleanroom suit. When hanging the suit on the hanger, make sure you zip the zipper, so that the suit will

- not fall from the hanger. Hang the suit in the appropriate section (staff/ external users).
- 14.5.2. Remove gloves, head, beard and shoe covers and throw into the gowning room waste bin.
- 14.5.3. Swipe your card on the exit card reader.
- 14.5.4. User who will not swipe the card upon exiting the cleanroom, will be charged for four hours of cleanroom use.

# 15. Working off shift / after regular work hours

- 15.1. No one is allowed to work in the cleanroom alone. Another knowledgeable person who has received a safety training must be within range of seeing the person or hearing the person and be able to respond to any emergency.
- 15.2. Work on the weekends is not allowed.
- 15.3. Certification for night work is given separately to each student.
- 15.4. The tool must be reserved until 15:00 at the day you wish to work at night. In addition, notify the staff if you intend to work at night.
- 15.5. No work with toxic / flammable gases is allowed off shifts. The main valves of the cylinders must be closed.
- 15.6. No work with acids and bases for wet etch and cleaning is allowed off shifts.

#### 16. First Aid

- 16.1. In the entrance of each fab there is a first aid cabinet. In fab2 there is also a first aid kit for HF.
- 16.2. In the entrance of the fab1 and fab2 and inside fab3 there are safety showers and eye wash stations in case of chemical spills on the skin and eyes.

16.3. In case of any accident notify NFC's staff.

### 17. Safety event:

- 17.1. Any safety event is managed by the university's emergency team.
- 17.2. Each room has an emergency door.
- 17.3. Emergency power disconnection: each room has an emergency button to disconnect the power. Machines that use high voltage have their own emergency disconnection button.
- 17.4. In all fabs there are emergency buttons:

Fab1: in the entrance, above water cooler.

Fab2: on the right side of the emergency door.

#### 17.5. Alarms in fab 1:

Orange light: problem with air exhaust. Leave the cleanroom and notify the center's workers.

Red light: Reactive gas leak. Leave the room as quickly as possible (make sure no one is inside, help others to evacuate as needed), press the emergency button and call for help according to the checklist (in the appendix).

- 17.6. In case of a chemical related accident, put on appropriate personal protective equipment, including PVC apron, ABEK-P3 respirator, closed shoes, and nitrile gloves. Aid injured people out of the cleanroom, to emergency shower as needed, and call for help. Security post phone number: 08-6461555 (internal 61555).
- 17.7. In case of a toxic / flammable gas alarm, everyone must evacuate the cleanroom immediately. Push the emergency button inside the cleanroom (next to the fire alarm) and call for help. Do not enter the cleanroom as long as a toxic gas may be present. Consults the emergency personnel.

- 17.8. If the assisting person cannot move the injured out of the cleanroom without risking himself / herself, he must evacuate the area and call emergency numbers and the security post immediately.
- 17.9. In case of an emergency, a representative of the nanofabrication center should be in contact/present, to instruct the universities personnel in the details of the event and provide them with the necessary information.
- 17.10. Emergency/ Security teams will not enter the cleanroom in case of safety event, unless there is a trapped person inside that must be rescued. In any case, gas valves must be closed. Wait until all gases are cleared, and the gas detectors show no toxic or flammable gas presence. Only then enter the room to fix the malfunction that caused the leak.
- 17.11. In case of a need to rescue a person from the cleanroom, enter only with a self-contained breathing apparatus and a suit proofed against toxic gas. The safety equipment is stored in a safety equipment cabinet outside fab1. It includes two SCBA's and two suits. The SCBAs' maintenance is done by the safety department. Once a warning about a gas leak is received, and the security department is informed about a trapped person inside the cleanroom, the university teams- safety and security and the NFC's representatives will be called to the event site. The university emergency team will oversee the event. Two people from the university emergency team will wear SCBA's and suits and enter to the fab to rescue the trapped person. The NFC's representatives will assist with information about the gas that have leaked and/or source of the leak.
- 17.12. An ambulance will be called to evacuate the injured person to the hospital.
- 17.13. In case of fire, call the firefighting department immediately.

#### 18. Emergency:

# Checklists for specific emergency events are in the appendices

- 18.1. In case of any emergency such as: accident involving injured people, fire, or chemical leak/spill, notify immediately center's workers, Dr. Erez Golan, security and safety department.
- 18.2. Evacuate from the danger zone, while helping others.
- 18.3. Use safety means (fire extinguisher, emergency buttons/ emergency power disconnection button etc.)
- 18.4. Safety and security personnel will oversee the emergency event. When they arrive, give them as much information as you can, and follow their instructions.

#### 18.5. Emergency phone numbers:

Police 4100

Magen David Adom (ambulance) 4101

Fire Department 4102

National center for hazardous materials 12226911

# Accident or Safety event

Security 61888/61555

Avner Mizrahi, safety inspector 052-8795998

Shahar Goldberg, head of safety department 054-6775599

#### NFC's Staff:

Dr. Erez Golan (Manager of NFC) 052-6839402

Alfred Sacharovich (Maintenance Engineer) 052-8338937

Itzhack Mamman (Maintenance Engineer)	054-5910995
Avraham Reiner (Fabricating Engineer)	052-2291270

# Facilities Malfunctions (Water, Electricity, Gas)

Maintenance 61666

# **Appendices**

#### Following are checklists for emergency events:

- Chemical Spill
- Gas Leak
- Fire
- Man Injury

# **Chemical Spill Handling Checklist**

# In case of hazardous chemical spill, follow this checklist:

- 1. Alert the people in the FAB
- 2. Evacuate them and stay away from the area of the spill.
- 3. If the spill occurred inside the FAB:
  - Evacuate the FAB.
  - Close the door.
  - Put a sign banning the entrance to the FAB.
- 4. Notify the security post. Phone number: internal 61888/61555 or 08-6461888/08-6461555.
- 5. Notify the FAB staff.
- 5. In case of injuries, taking care of injured people is top priority:
  - Move them to fresh air.
  - Wash the affected areas using the emergency shower/ eye wash.
- 6. If you are familiar with the spilled chemical properties, and you are certified to handle the spill, call for additional trained employee, and follow the next steps:
  - a. Wear necessary safety gear:
    - Mask with a ABEK-P3 filter
    - Chemical resistant gloves
    - Safety suits
    - Shoe's protection
  - b. Use designated means to absorb the chemical Trivorex is on top of chemical cabinet in the chase).
  - c. Put the absorbing powder in a waste bag.
  - d. Put your safety gear (suit, gloves, and shoes' protection) inside this bag.

- e. Close the bag with cable tie.
- f. Label the bag as waste, with the name of the material.
- g. Dispose the bag as chemical waste.
- 7. Notify about the chemical spill incident ASAP to the security department and the safety department, and pass them the required information, in order to draw up appropriate conclusions, and to refill the safety gear in the emergency cabinet.

# **Emergency numbers:**

Police 4100

Magen David Adom (ambulance) 4101

Fire Department 4102

National center for hazardous materials 12226911

# Accident or Safety event

Security 61888/61555 Avner Mizrahi, safety inspector 052-8795998 Shahar Goldberg, head of safety department 054-6775599

# NFC's Staff:

Dr. Erez Golan (Manager of NFC) 052-6839402 Alfred Sacharovich (Maintenance Engineer) 052-8338937

#### Gas leak emergency checklist

- 1. Alert other people who currently work in the FAB and evacuate immediately.
- 2. Press the emergency button at the exit.
- 3. Help injured people out of the FAB.
- 4. If the assisting person cannot move the injured out of the cleanroom without risking himself / herself, he must evacuate the area and call emergency numbers and the security post immediately. An ambulance must be called to evacuate the injured person to the hospital.
- 5. Alert people in the area, and make sure they are leaving the area.
- 6. Stop electricity supply to the FAB by pressing the red emergency button at the entrance.
- 7. Notify the security post immediately about the gas leak and its exact location. Phone number: internal 61888/61555 or 08-6461888/08-6461555
- 8. Notify the FAB staff.
- 9. Close main gas valves.
- 10. Do not enter the cleanroom if a toxic gas may be present. Consults the emergency personnel.
- 11. When the emergency security team, safety personnel, fire fighters and paramedics arrive:
  - a. The university emergency team will oversee the event.
  - b. Follow their instructions.
  - c. Pass them information regarding:
    - Injured people
    - Hazardous gases
    - Any other relevant information.
- 12. Emergency/ Security teams will not enter the cleanroom in case of safety event, unless there is a trapped person inside that must be rescued. In any other case, gas valves must be closed. Wait until all gases are cleared, and the gas detectors show no toxic or flammable gas presence. Only then enter the room to fix the malfunction that caused the leak.
- 13. In case of a need to rescue a person from the cleanroom, enter only with a self-contained breathing apparatus and a suit proofed against toxic gas. The safety equipment is stored in a safety equipment cabinet outside fab1. It includes two SCBA's and two suits.
- 14. Wait outside the building in a safe place, and assist making sure the injured people that worked with you are evacuated.

# **Emergency numbers:**

Police 4100

Magen David Adom (ambulance) 4101

Fire Department 4102

National center for hazardous materials 12226911

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National center for hazardous materials 12226911

# Accident or Safety event

Security 61888/61555 Avner Mizrahi, safety inspector 052-8795998 Shahar Goldberg, head of safety department 054-6775599

# NFC's Staff:

Dr. Erez Golan (Manager of NFC) 052-6839402 Alfred Sacharovich (Maintenance Engineer) 052-8338937

### **Injury checklist**

# For injuries not related to fire, gas leak or chemical spill:

- 1. In case you were injured, call for help (NFC's staff or others who work in the room with you).
- 2. Assist the injured person: depending on the injury, use the first aid kit (there is one in each FAB).
- 3. Notify the NFC's staff.
- 4. In case of severe injury, call an Ambulance (101, internal 4101) and notify the security department (internal 61888/61555 or 08-6461888/08-6461555).
- 5. Make sure the injured are evacuated to the hospital- by ambulance or independently.
- 6. Notify the safety department.

### **Emergency numbers:**

Police 4100

Magen David Adom (ambulance) 4101

Fire Department 4102

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