

Safety Procedure for Archaeological Excavations

1. General

- 1.1 In areas managed by the Israel Nature and Parks Authority (hereinafter: INPA), which generally include declared or approved nature reserves and national parks, archaeological excavations are sometimes conducted.
- 1.2 These activities vary between sites and depend on the characteristics of the archaeological asset being excavated at each site.
- 1.3 Work at archaeological sites may expose excavation workers and visitors to the excavation to safety hazards.
- 1.4 To prevent workplace accidents (and harm to life and property resulting from them), the INPA is also subject to occupational safety legislation and regulations.
- 1.5 This document defines the general safety guidelines applicable to excavators and visitors at archaeological excavations conducted in INPA-managed sites and areas by excavators who are not INPA employees.
- 1.6 **Note:** This procedure focuses exclusively on safety in archaeological excavations. Safety for conservation activities occasionally conducted as part of development and maintenance shall be carried out in accordance with occupational safety regulations and INPA safety procedures.

2. Legal Basis / References

- 2.1 Occupational Safety Ordinance
- 2.2 Occupational Safety Regulations

3. Procedure Objectives

- 3.1 **Define General Safety Guidelines** for excavators and visitors at archaeological excavations in INPA areas, starting from the planning phase, through excavation, to site clearance upon completion. To this end, the Head of the Archaeology Institute from the academic institution or the director on behalf of the Israel Antiquities Authority (IAA) (if the excavation is conducted by the IAA) or the direct manager of the excavation leader (if the excavation is conducted by an academic institution from abroad) as well as the excavation director (as defined below) must sign that they have read and understood this procedure. This signature will be included on the excavation permit issued by the INPA.
- 3.2 **Establish a Conceptual and Professional Framework** for those involved and engaged in safety at INPA sites.

3.3 Provide a Foundation for Drafting Procedures, Guidelines, and Local Instructions in the field of safety in archaeological excavations.

4. Definitions (Alphabetically)

- 4.1 INPA Area/Site:** A complex under the responsibility of the Israel Nature and Parks Authority.
- 4.2 Archaeological Site:** The excavation area, including associated logistical and administrative facilities (offices, warehouses, containers, laboratories, gathering areas, dining areas, restrooms, water points, etc.).
- 4.3 Confined Space:** A space with restricted entry and exit, or potentially containing a hazardous atmosphere, not intended for prolonged human occupancy, such as caves, tanks, pits, underground passages, pipes, compartments, or closed rooms.
- 4.4 Safety Advisor:** A safety advisor or safety officer appointed by the excavation manager, certified by the Chief Labor Inspector from the Ministry of Economy / Labor Inspection Department and holding a valid "Certificate of Competence."
- 4.5 National Safety Manager at INPA:** The head of the Safety and Fire Prevention Division at INPA, guiding and overseeing safety activities across all INPA-managed areas in Israel.
- 4.6 Regional Safety Manager at INPA:** The deputy district manager or their designee.
- 4.7 Regional Maintenance Officer:** Reporting to the district manager. As part of their role, they assist the deputy district manager in managing the regional safety system, particularly regarding technical teams in workplace safety, inspections, and contractor work supervision.
- 4.8 Excavation Manager:** The archaeologist leading the excavation who also holds the excavation permit issued by the INPA and the excavation license issued by the IAA.
- 4.9 Hazard (Obstacle):** A condition or obstacle likely to cause harm to a person's health, or damage to property or the environment.
- 4.10 Safety Risk:** The combination of the likelihood or frequency of an event causing harm or damage and the severity of the expected consequences of such an event.

Clarification: In the safety context, a "risk factor" includes a beneficial component, whereas a "hazard" differs in that it provides no benefit and must therefore be removed or corrected.

5. Methodology

5.1 Preliminary Actions Before Excavation.

- 5.1.1 In any national park or nature reserve where a new archaeological excavation is planned, the excavation manager must review the following actions to prepare the site from a safety perspective.
- 5.1.2 Upon opening the excavation, the excavation manager and/or their appointed safety advisor must prepare a risk assessment.

5.2 Preliminary Site Visit.

- 5.2.1 Approximately one month before excavation begins, a site visit will take place at the designated archaeological excavation area, involving the Regional Heritage Coordinator, the site manager/regional ranger, the excavation manager, the regional safety manager, or their designees.
- 5.2.2 The purpose of the visit is to present the excavation plan and INPA's excavation conditions, including safety considerations. The regional safety manager will document the visit in writing, with detailed safety observations, especially regarding visitor safety.

5.3 Excavation Commencement

- 5.3.1 The excavation site shall be fenced and signposted.
 - 5.3.2 The first actions at the excavation site will involve the removal, fencing, or sealing of hazards as determined during the preliminary visit. If the excavation manager encounters a safety risk or hazard, they must contact the regional safety manager at INPA for professional guidance.
 - 5.3.3 Pest control, if necessary, will be carried out by a certified exterminator, approved by the regional ecologist, and in accordance with all laws.
 - 5.3.4 For excavations deeper than 1.4 meters below ground level, measures to prevent collapse will be taken and approved by a safety advisor appointed by the excavation manager or institution conducting the excavation. Any work conducted in a confined space, as defined in the above definitions, must adhere to all legally binding safety rules and practices for work in confined spaces.
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5.4 Safety in Excavation Equipment Preparation

- 5.4.1 The excavation manager is responsible for ensuring: Lifting equipment and accessories (winches, cranes, and their accessories) brought to the site have safety certifications.
- 5.4.2 The excavation manager is responsible for ensuring: Electrical tools (drills, chisels, extension cables, mortar mixers, generators, etc.) brought to the site are accompanied by documents verifying their proper functioning.

5.5 The excavation manager is responsible for installing permanent safety measures at the excavation site, including

- 5.5.1 A standard first aid kit.
- 5.5.2 Firefighting equipment.
- 5.5.3 A functioning 6-kg powder fire extinguisher at the excavation equipment storage area.
- 5.5.4 For excavations in areas with flammable vegetation: 3 fire beaters, 10 sand buckets, and 2 backpack sprayers.
- 5.5.5 The excavation manager must have a mobile phone and a list of emergency contact numbers.
- 5.5.6 A suitable evacuation and rescue vehicle must be on-site throughout the excavation duration.

5.6 Safety Briefing and Instructions for Excavation Participants.

- 5.6.1 The excavation manager is responsible for ensuring excavators receive a safety briefing before excavation begins, covering:
 - A. Risks and work methods in excavation.
 - B. Use of personal protective equipment.
 - C. Working alongside heavy mechanical equipment.
 - D. Use of electrical tools.
 - E. Risks from working at height, ladder use, and scaffolding.
 - F. Safety instructions for operating additional equipment based on the nature of the work.
 - G. Provision of personal protective equipment as needed, in accordance with all laws.
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5.7 Safety in Working at Height on Scaffolding.

- 5.7.1** All work at height shall be carried out in accordance with the Safety at Work Regulations (Work at Height), 2007.
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5.8 Safety in Working with Ladders.

5.8.1 General

- 5.8.1.1 The excavation manager must ensure that ladders have a certified standard mark from an authorized institute.
- 5.8.1.2 They must verify the ladder's integrity before use.
- 5.8.1.3 They must ensure that all climbing and/or work on ladders are conducted according to mandatory and customary safety rules.
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5.9 Safety in Cave Work.

- 5.9.1 The excavation manager is responsible for identifying and addressing caves and abandoned structures suspected of harboring pests before human entry.
- 5.9.2 During risk assessment preparation, caves and/or abandoned structures will be noted.
- 5.9.3 Caves or abandoned structures previously used as animal shelters and residences are immediately suspected of containing pests. Signs such as porcupine quills, droppings, fur remains, etc., indicate animal activity.
- 5.9.4 Suspicion arises regarding caves discovered post-excavation commencement, whose openings were previously accessible only to animals.
- 5.9.5 If a cave and/or abandoned structure is suspected, it must be signposted at all possible entrances and human entry prohibited until treatment is completed.
- 5.9.6 If necessary, the excavation manager, in coordination with the regional ecologist, will engage a certified pest control company to carry out extermination at the site.
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5.10 Excavation Completion.

- 5.10.1 Upon completing excavation activities and before the excavator leaves the site, a site visit will take place involving the Regional Heritage Coordinator, the site

manager/regional ranger, the excavation manager, the regional safety manager, or their designees.

- 5.10.2 The purpose of the visit is to hand over the excavation area after completing required safety measures and meeting INPA conditions. The regional safety manager will document the visit in writing, with detailed safety observations, especially regarding visitor safety.

6. Responsibilities for Procedure Implementation

6.1 Excavation Manager and Appointed Safety Advisor:

- 6.1.1 To comply with all instructions in this procedure and all relevant safety laws and regulations.

6.2 National Safety Manager (Head of the Safety Division):

- 6.2.1 To update the procedure as needed and conduct random safety inspections at excavation sites either personally or through the regional safety manager.

7. Annexes / Applicable Documents

8. Supervision and Procedure Approval

The procedure is approved and valid and has been included in the INAP's Procedures Manual – Last updated: April 6, 2022.

Approving Authority	Approval Date	Signature
Legal Advisor		
Head of Safety Division		
Head of Logistics Division		
Head of Heritage Division		
Deputy Director General		

9. Distribution.

9.1 This procedure is distributed to the following:

9.1.1 Headquarters officials and, through them, to the divisions and departments of the headquarters.

9.1.2 District managers and their deputies and, through them, to all relevant field employees (regional coordinators, rangers, site managers, INPA employees, etc.).

9.2 The distribution of this procedure is the responsibility of the Head of the Safety Division.

Example of a permit for archaeological excavations* 4pages

 Israel Nature and Parks Authority PERMIT FOR PERFORMING WORKS IN NATURE RESERVES AND NATIONAL PARKS							
Date: _____ District Name: _____ Permit Number: _____							
Permit to Perform Works in a Nature Reserve and National Park By virtue of its authority under Section 30 of the National Parks, Nature Reserves, National Sites and Memorial Sites Law, 1998-תשמ"ח, and Regulation 18 of the Nature Reserves Regulations (Procedures and Conduct), 1979-תשל"ט, the Israel Nature and Parks Authority (INPA) hereby authorizes the execution of the activities included in this permit, subject to the following conditions:							
The permit is granted to:	[Full name of the permit applicant, as appears in the excavation license] (hereinafter: "the Permit Holder")						
Location of the activity:	[Full name of the national park or nature reserve where the excavation/survey will take place]						
Validity of the permit:	[Specify the dates as stated in the excavation license or in the permit application documents]						
Type of activity:	Permit for activities in national parks and nature reserves [mark with ✓ the appropriate category]						
Category:	<table border="1"> <tr> <td>Archaeological Excavation</td> <td>Research and Surveys</td> <td>Management</td> <td>Infrastructure</td> <td>Conservation and Development</td> <td>Miscellaneous</td> </tr> </table>	Archaeological Excavation	Research and Surveys	Management	Infrastructure	Conservation and Development	Miscellaneous
Archaeological Excavation	Research and Surveys	Management	Infrastructure	Conservation and Development	Miscellaneous		
Liability and Insurance	- The Permit Holder shall bear full responsibility towards the Authority for any bodily injury and/or property damage and/or expense and/or loss caused to the Authority and/or to the Permit Holder and/or their employees and/or to anyone acting on their behalf and/or to any other person, including damages to third parties, directly or indirectly, in connection with or resulting from the activities carried out under this permit, including related activities. - The Permit Holder releases the Authority from any liability for any such injury, damage, expense, or loss, and declares and undertakes to bear full responsibility without any right of recourse against the Authority. - The Permit Holder declares and undertakes to compensate and indemnify the Authority immediately upon its first demand for any damage or expense caused to the Authority, and/or its property, and/or its employees, and/or visitors at the site, and/or its employees and/or any third party due to its activity or that of anyone acting on its behalf under this permit, including legal expenses incurred by the Authority in defense against any such claim. - This permit is subject to insurance submitted by the applicant and approved by the Insurance Department of the Israel Nature and Parks Authority. It is agreed that the Permit Holder may choose not to obtain property insurance, in whole or in part, but the Permit Holder releases the Authority from any liability for any damage for which the applicant would have been entitled to compensation had the insurance been fully in effect (or would have been entitled to compensation were it not for the deductibles listed in the policy). However, the exemption shall not apply to any person who caused the damage intentionally. - Performing the activities under this permit constitutes full consent of the Permit Holder to all the terms and conditions of the permit, without exception. - Any deviation from the terms of this permit constitutes a violation by the Permit Holder and will immediately result in termination of the permit and suspension of work until the matter is clarified by the Authority with the Permit Holder, without prejudice to any other remedy available to the Authority. - The Authority may cancel or modify the permit or its conditions in case of a change of circumstances and/or in the event of a violation of the permit by the Permit Holder, at its sole discretion and according to law.						

8 Am Ve'Domo Street, Givat Shaul 95483, Jerusalem Tel: 02-5005441 – (Israel Nature and Parks Authority)
<https://www.gpa.co.il>



Israel Nature and Parks Authority
PERMIT FOR PERFORMING WORKS IN NATURE RESERVES AND NATIONAL PARKS

Date: _____	District Name: _____	Permit Number: _____
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Guidelines and Conditions of the Permit	8. This permit does not exempt from obtaining any other permit or license required by law, and the validity of this permit is conditional upon obtaining all such additional permits or licenses. 9. The excavation/survey shall be conducted subject to the instructions and conditions detailed in this permit. 10. The excavation/survey shall be coordinated with the site manager / regional ranger : 11. The Permit Holder and the excavation expedition shall ensure the area is clean, fenced, and marked with a "No Entry" sign, according to the "Archaeological Excavation Safety Procedure" of the INPA. 12. Excavation may be carried out throughout the year, except on Saturdays, holidays, and festivals. 13. If there are no sanitary facilities at the site, the expedition shall place a portable chemical toilet in coordination with the site manager or regional ranger for the toilet's location, ensure cleanliness around it during the excavation, and remove it upon completion. 14. The expedition shall use jute sacks only, for ecological and aesthetic reasons and because they are resistant to disintegration. The use of plastic bags is prohibited. 15. The expedition shall coordinate drone photography with the district heritage officer / regional ranger / site manager. 16. The Permit Holder shall report to the Head of the Archaeology and Heritage Department, Ms. Orit Bortnik, 050-5063067, on any special finding uncovered during the excavation. The information shall be published only after mutual consent between the excavation expedition and INPA and in coordination with the INPA Spokesperson's Office. 17. Any significant change in the excavation that may damage the site requires prior coordination and written approval from the Head of the Heritage Section, Dr. Yosi Bordowicz, 054-7650077. 18. Any dismantling or movement of ancient or new walls, paths, buildings or parts of buildings, architectural items displayed to the public, etc., including opening new excavation areas not included in the submitted excavation plan, requires a preliminary inspection with the district heritage officer and may only be carried out with the consent of the Permit Holder and excavation expedition and subject to written approval from the Archaeology and Heritage Department. 19. Conservation accompanying excavation shall be conducted in accordance with "Conservation Accompanying Excavation Procedure No. 5.5" of the Israel Antiquities Authority, and shall be carried out by a certified conservator listed in the approved conservator registry of the Israel Antiquities Authority. 20. A "Conservation Accompanying Excavation Summary Report," according to Appendix B of the Conservation Accompanying Excavation Procedure, shall be submitted at the end of each excavation season, no later than three months after completion, to the district heritage officer. 21. Excavation spoil (earth and stones) shall be concentrated at a location agreed upon in advance between the Permit Holder, site manager, regional ranger, and district heritage officer, for backfilling purposes according to Appendix C ("Excavation Backfilling Specification") of the same procedure. 22. The Permit Holder shall strive to cover the excavation areas at the end of the excavation season and no later than five years after completion, according to the "Excavation Backfilling Specification" and in coordination with the district heritage officer.
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Date: _____	District Name: _____
Permit Number: _____	
Heritage Officer Report: I hereby confirm that the activities specified in this permit were carried out in accordance with the instructions and conditions of the permit.	
Name of Heritage Officer	_____
Signature of Heritage Officer	_____
Date:	_____
Heritage Officer Summary Report and Remarks:	_____
<u>It is mandatory to report at the end of the excavation and return this report to the Heritage and Landscape Division.</u> Attachments to this Permit: *Archaeological Excavation Safety Procedure* of the INPA – an integral part of the permit instructions. *Conservation Accompanying Excavation Procedure No. 5.5* of the Israel Antiquities Authority. After signing, copies shall be sent to: Recipient – Permit Holder, District, Ranger, Active File, Deputy District Director.	
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*The guidelines in the permit master template are generic guidelines, to which specific instructions are added for the district, site, area, and each individual excavation.