



BAGFAŞ PORT GAS MEASUREMENT AND DEGASSING OPERATIONS PROCEDURE

1. OBJECTIVE :

a) The Port of BAGFAS is specified in the Directive on the Classification of Hazardous Products of United Nations (UN) in ships or sea vehicles; tanks, storage spaces for flammable, explosive and toxic substances in solid, liquid, gas, aerosol form and enclosed spaces and pipelines at the ends of such spaces, before and after the construction, modification, maintenance, repair or dismantling operations, to determine the responsibilities of the officers who make measurements in order to ensure safe entry into the dangerous neighbourhood to be treated and cold or hot work in terms of occupational health and safety and environmental safety.

2. DEFINITIONS:

a) Aerosol: Multi-phase systems consisting of very small solid or liquid particles suspended in air or any gas in the environment, b) Subcontractor: An employer is a natural or legal person or legal entity that engages in business involving the production of goods or services carried out at the workplace or in a part of the main business of the employer and whose work requires professional expertise, institutions and organizations that are not personality, c) Residual gas: Any flammable, explosive, toxic or choking gas present in closed or hazardous location, ç) Noble gas: The non-chemical reaction gas (He, Ne, Ar, Kr, Xe, Rn) d) Minister: Minister of Transport, Maritime Affairs and Communications e) Gas: Tanks, containers, etc., which are usually in a fixed shape and not in a specific volume but depending on the values of pressure and temperature. liquid or solid material which can be spread so as to fill the closed spaces indefinitely, does not resist the shape change and expands under the influence of pressure and / or temperature changes f) Discharge certificate: As the gas concentration in closed or dangerous areas is measured using measuring devices manufactured for this purpose and calibrated in accordance with the operating instructions, it is safe enough for explosion, fire and working health to ensure safe entry, signed by the Degassing expert and signed, g) Degassing measurement: Measuring and measuring the concentration of gas in closed or dangerous areas using callipers manufactured for this purpose and calibrated in accordance with the instructions for use, at the time of measurement, the said spaces are suffused, toxic, explosive and / or flammable, hot / the measurement process to determine whether it is safe enough for similar transactions ğ) Degassing expert: Engineer, chemist, mechanical engineer, ship engineer, ship engineer, engineering engineer or science faculty who have graduated from undergraduate level teaching at universities have worked at a shipyard or ship for at least two years or have worked at maintenance, repair or ship dismantling facility for at least two years those who graduated

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from the maritime faculties of universities and worked as first officers in oil / petroleum derivative tanks, chemical, LNG, LPG tankers for at least two years and the personnel determined by the Administration and assigned to supervision completed the given degassing training the applicant with the certificate, the person who has obtained the Certified Degassing Expert Certificate, h) Degassing expert support staff: Those who are teaching associate degree at universities or graduates of vocational high schools in chemistry, machinery, shipbuilding, ship machinery business, marine transportation enterprise, shipbuilding, ship management or occupational health and safety departments and those assigned by the Administration the personnel who have received the certificate of completion of the degassing training and the applicant who has received the Certificate of Support Personnel of the Degassing Expert, i) Vessel: Any boat which is able to navigate with other equipment from the sea regardless of its name, tonnage and purpose of use, i) Ship engineer: Engineer who can register to ship engineer's room, j) Officer: ship master, demineralist, occupational safety expert, maintenance supervisor or plant official k) IMO: International Maritime Organization, l) Administration: General Directorate of Shipyards and Coastal Affairs, Ministry of Transport, Maritime Affairs and Communications, m) Inertation: Switching the environment from a flammable or reactive state to a safe state by means of addition of inert gas to reduce the rate of oxygen in the air to such an extent that gas or liquid vapours are not burned, n) Inert gas: The type of gas that does not enter the chemical reaction under certain conditions, o) Closed area: Tanks, pipelines, cargo warehouses, rudder fans, fully enclosed hatches, covered railing, and similar enclosed spaces, ö) LEL: Lowest explosion limit, p) Port Authority: Ministry of Transport, Maritime Affairs and Communications Port Authorities, r) PEL: Permissible exposure limit, s) Hot Work: Operation using spark or heat generating tools, tools and devices, operations performed with open flame, and operation of raising the ambient temperature, ş) Cold Work: The use of spark or heat generating tools, devices and devices that may cause flash, explosion and fire hazard, open flame operation and operation without elevated ambient temperature, t) Water vehicle: Any type of vehicle and structure which can be floated outside the ship and used in accordance with the intended use, u) Hazardous area: Strong, liquid, gas, aerosol containers containing flammable, explosive, poisonous or stiffening substances, tanks and continuous enclosed spaces and pipelines, ü) Facility: Shipyard, boat manufacturing place, berth or ship recycling site, v) Plant Authority: Shipyard, boating place, haulage place or owner of the ship recycling site or authorized by the owner, y) VOC: Volatile organic compounds.

3. RULES:

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a) IMO's International Code on Dangerous Shipments Carried by Sea; vessels and water vehicles carrying flammable, explosive, poisonous or stiffening substances in the form of cargo, slop, waste or residue in gas tanks or compartments stored for the purpose of cooling the cargo of the cargo can not approach the facility until they have been demineralized. (2) Ships and water crafts which have been inerted in cargo volumes or other volumes within the ship's premises shall not enter the facility.

b) Desalination procedures to be carried out at anchorage areas may be exempted with the permission of the Port Authority in cases where vessels and water vehicles are required to enter emergency service due to danger of sinking or very serious damage. However, in such cases, before the vessels arrive at the facilities and after they approach the ship, the ship master and the contracting officer signing the contract shall be entrusted to the Port Authority that all kinds of life, property and environmental safety shall be taken by the said facilities and ship master and necessary gas measurements shall be made

c) No closed or dangerous places can be entered without arranging the discharge document. After the discharge document has been issued; the installation authority or the work security expert gives the safe entrance permit to the closed or dangerous places in the ships and watercraft which have the purpose of construction, modification, maintenance, repair or disassembly. In the case of vessels in the area of iron, the ship's master gives the safe entry permit in the case of the discharge document.

d) Gas measurements shall be carried out by the degassing expert or the degassing expert support person in the closed or dangerous places of the vessels or water vehicles to be closed or in dangerous places, hot or cold working, before such work and operations.

e) Before the discharge expert has issued the discharge certificate; in writing, from the plant authority or work safety expert, or from the ship if at anchor, if the appropriate fire fighting equipment is available for use, that adequate lighting is provided by lighting equipment, that all measures for the safety of life and property have been taken and that appropriate personal protective equipment has been fitted to the personnel.

f) In situations where the ambient atmosphere varies, adequate ventilation must be provided without interruption. This should be checked in coordination with the plant authority or work safety expert in the initial and periodic measurements to be taken by the degassing expert.

g) If hot or cold operation is interrupted in enclosed or hazardous areas, the gas measurements are repeated before resuming operation. In any case, measurements made by the degassing specialist can not exceed the validity period of 8 hours.

h) The validity period of the certificate can not exceed 8 hours on vessels and water vehicles that have obtained the certificate of desalination for approaching to Facility.

i)Form-003 will be filled up before commencing hot work.

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j)Gas free operations are not carried out in BAGFAŞ port except force major.If there is an obligation ships master is responsible from the operation.

Ek-1

Gazdan Arındırma Belgesi Gas-Free Certificate																																												
Bu belge Gemi ve Su Aracıların Gazdan Arındırma Yönetmeliği gereğince düzenlenmiştir. This certificate is issued under provisions of the "Regulations For The Gas-Freeing of Ships and Water Craft."																																												
Gemi / Su Aracı İle İlgili Genel Bilgiler / Information About the Ship/Water Craft																																												
Adı/Name																																												
Donatamı / Owner																																												
Gros Tonajı / Gross Tonnage																																												
Bayrağı / Flag																																												
Bağlama Limanı / Port of Register																																												
Gazdan Arındırma Belgesinin Ne Tıp Bir İşlem İçin İstendiği: This Certificate Issued For:					Giriş Müsaadesi / Entry Permit					<input type="checkbox"/>																																		
					Soğuk İşlem / Cold Work					<input type="checkbox"/>																																		
					Sıcak İşlem / Hot Work					<input type="checkbox"/>																																		
İlk Ölçüm Tarih ve Saati First Measurement Date And Time					gg/aa/yyyy dd/mm/yyyy					ss:dd hh:mm																																		
Tesise Girmeye Uygundur Eligible To Enter A Facility					Evet Yes					<input type="checkbox"/>	Hayır No	<input type="checkbox"/>	N/A Not Applicable	<input type="checkbox"/>																														
Ölçüm Yapılan ve Gazdan Arındırma Belgesinin Geçerli Olduğu Kapalı/Tehlikeli Mahaller Gas Measured And Certified Enclosed / Dangerous Spaces					Patlayıcı, Parlayıcı, Boşucu veya Zehirleyici Gazlar Explosive, Flammable, or Toxic Gases					**Kapsül Bölme Sınıfı Explosion Space Category		**Tehlikeli Kategorisi Safety Category		Mahalle Üstü Açıklamalar Annotations for the Space		Ölçüm Setiyle Alınan Belge/Sertifika Numarası Apparatus /Set /Bio Certificate /The Measurement (Measurement Certificate Number)																												
					ÖLÇÜM SONUÇLARI MEASUREMENT RESULTS					I-II-III-IV		1-2-3-4-5																																
% LEL					O ₂ % Vol					CO ppm					H ₂ S ppm					VOC ppm					Diğer Other Gas																			
1-																																												
2-																																												
3-																																												
4-																																												
5-																																												
6-																																												
7-																																												
8-																																												
9-																																												
10-																																												
GENEL AÇIKLAMALAR, ÖZEL DURUMLAR, UYARILAR General Instructions / Exceptions / Warnings																																												

Sürekli ve Periyodik Ölçüme Gerek Var mı? Do You Need Continuous And Periodical Measurement	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
Sürekli ve Periyodik Olarak Yapılan Ölçümlerde Yeniden Ölçüm Yapılması Gereken Gün ve Saat Remeasurement Date And Time For Continuous And Periodical Measurements	1		4	
	2		5	
	3		6	
Ölçüm Aletinin Markası Brand of Measuring Set				
Ölçüm Aletinin Seri Numarası Serial Number of Measuring Set				
Ölçüm Aletinin Son Kalibrasyon Tarihi Last Calibration Date of Measuring Set				

Tecrübe Yetkilisi/Kaptan
Facility Executive/Person in Charge/Captain
İmza
Signature

Gazdan Arındırma Uzmanı
Gas-Free Expert
Sertifika Numarası
Certificate Number
İmza
Signature

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Sıcak Çalışmaya Uygunluk Belgesi
Certificate of Conformity for Hot Work

İlgili kapalı veya tehlikeli mahallerde yapılacak olan sıcak çalışmalara aşağıda yer alan koşullar ve bilgiler dahilinde müsaade verilebilir.

Hot works can be permitted in the enclosed and dangerous spaces in accordance with below conditions and informations

Sıcak Çalışmanın Yeri (Hot work location):

Numara (Number)	Mahallin Adı (Name of Space)	Mahallin Yeri (Location of Space)

Sıcak Çalışmayı Yapacak Personele Bilgi Verildi mi? <i>Do the workers keep informed for hot work</i>	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
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Görevli Tarafından Yapılan Kontrol ve Değerlendirmeler:
Controls and assessments carried out by the person in charge

1	Çalışma mahalleri gaz ölçüm cihazı ile kontrol edildi mi? <i>Do work spaces be controlled with gas measuring set</i>	Evet Yes	Hayır No
2	İçerisine girilebilir kapalı veya tehlikeli mahaller sıcak işlem için temizlendi mi? <i>Do enclosed and dangerous spaces, given permission to enter, be cleaned for hot work</i>	<input type="checkbox"/>	<input type="checkbox"/>
3	İçerisine girilemeyen kapalı veya tehlikeli mahallerde sıcak çalışma yapılacak ise gerekli ölçüm ve temizlik yapıldı mı? <i>Do enclosed and dangerous spaces, not allowed to enter, be cleaned and measured for hot work</i>	<input type="checkbox"/>	<input type="checkbox"/>
4	Boru devreleri körlendi mi? <i>Do pipe lines be blanked</i>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sıcak çalışma yapılacak alanda yeterli derecede yangın söndürücü var mı? <i>Is there enough fire extinguisher in hot work space</i>	<input type="checkbox"/>	<input type="checkbox"/>
6	Özel şartlar veya önlemler <i>Special conditions and precautions</i>		

Yeni Yetkili/Görevli Kaptan
Facility Executive/Person in Charge/Captain
İmza

Gazdan Arındırma Uzmanı
Gas-Free Expert
Sertifika Numarası
Certificate Number

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Soğuk Çalışma / Emniyetli Giriş İçin Uygunluk Belgesi
Certificate of Conformity for Cold Work / Entry Permit

İlgili kapalı veya tehlikeli mahallerde yapılacak olan soğuk çalışmalara / bu mahallere emniyetli girişe aşağıda yer alan koşullar ve bilgiler dâhilinde müsaade verilebilir.

Cold works / safe entry permit can be permitted in the enclosed and dangerous spaces in accordance with below conditions and informations.

Soğuk Çalışma / Emniyetli Giriş Mahalli Bilgileri:
Informations About Cold Work / Entry Permit Spaces

Numara (Number)	Mahallin Adı (Name of Space)	Mahallin Yeri (Location of Space)

Soğuk çalışmayı yapacak personele bilgi verildi mi? Do the workers keep informed for cold work	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
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Görevli Tarafından Yapılan Kontrol ve Değerlendirmeler:
Controls And Assessments Carried Out By The Person In Charge

Tehlikeli veya kapalı mahallerin aşağıdaki gibi hazırlandığı kontrol edilecektir. Enclosed and dangerous spaces must be controlled in accordance with the below conditions					
1	Yıkanmış mı? Washed	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
	Süpürülmüş mü? Swept	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
	Dreyn edilmiş mi? Drained	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
	Diğer hususlar Other issues				
2	Müsaade edilen mahallerdeki valfler kapatıldı mı? Do the valves be closed in permitted spaces	Evet Yes	<input type="checkbox"/>	Hayır No	<input type="checkbox"/>
3	Tehlikeli veya kapalı mahallerin kullanımında içerdiği maddeler Substances contained in enclosed or dangerous spaces	Yerin Adı Name Of The Space		İçerdiği Madde Contents	
4	Özel şartlar veya önlemler Special conditions and precautions				

Tesis Yetkilisi/Görevli/ Kaptan
Facility Executive/Person in Charge/Captain
İmza
Signature

Gazdan Arındırma Uzmanı
Gas-Free Expert
Sertifika Numarası
Certificate Number
İmza
Signature

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