

Prosedur Operasi Penanganan Keadaan Gawat Darurat Pada Jaringan Pipa dan Fasilitasnya

Operating Procedure Guideline for Handling Emergency Conditions in Pipeline Networks and Facilities

Pernyataan

Pedoman *Prosedur Operasi Penanganan Keadaan Gawat Darurat Pada Jaringan Pipa dan Fasilitasnya* ini disusun oleh PT Perusahaan Gas Negara Tbk sesuai dengan proses bisnis perusahaan dan mengacu pada regulasi serta standar yang relevan terkait prosedur penanganan Keadaan Gawat Darurat Pada Jaringan Pipa dan Fasilitasnya. Pedoman ini merefleksikan komitmen PT Perusahaan Gas Negara Tbk untuk menjaga kesejahteraan pekerja dan lingkungan, serta tekad Perusahaan untuk membentuk sistem respons Keadaan Gawat Darurat yang cepat tanggap.

Statement

The *Operating Procedure Guideline for Handling Emergency Conditions in Pipeline Networks and Facilities* is prepared by PT Perusahaan Gas Negara Tbk in accordance with the company's business processes and referring to relevant regulations and standards related to procedures for handling Emergency Conditions in Pipeline Networks and Facilities. This guideline reflects PT Perusahaan Gas Negara Tbk's commitment to safeguard the welfare of workers and the environment, as well as the Company's determination to establish a responsive Emergency Condition system.

Pendahuluan

PT Perusahaan Gas Negara Tbk, yang selanjutnya disebut sebagai "PGN", telah menyatakan komitmennya untuk mewujudkan proses bisnis berkelanjutan yang bertanggung jawab kepada lingkungan dan masyarakat. Perkembangan bisnis PGN tentu tidak terlepas dari bahaya risiko yang mencakup Bisnis, Keselamatan dan Kesehatan Kerja, Pengamanan Aset, dan Pengelolaan Lingkungan, terkhususnya pada jaringan pipa dan fasilitas yang terkait. Dengan ini, PGN menyusun Pedoman Prosedur Operasi Penanganan Keadaan Gawat Darurat Pada Jaringan Pipa dan Fasilitasnya untuk mencegah dampak yang lebih luas dari kondisi Keadaan Gawat Darurat melalui penanggulangan yang cepat, efektif, dan maksimal. Prosedur ini digunakan untuk

Introduction

PT Perusahaan Gas Negara Tbk, hereinafter referred to as "PGN", has declared its commitment to realizing sustainable business processes that are responsible to the environment and society. The development of PGN's business cannot be separated from risk hazards, which include Business, Occupational Safety and Health, Asset Security, and Environmental Management, particularly in the pipeline network and related facilities. Therefore, PGN prepares the *Operating Procedure Guideline for Handling Emergency Conditions in Pipeline Networks and Facilities* to prevent broader impacts of Emergency Conditions through rapid, effective, and optimal countermeasures. This procedure is used to handle Emergency Conditions at every level

penanganan Keadaan Gawat Darurat di setiap tingkatnya pada kegiatan operasional jaringan pipa dan fasilitas PGN sampai keadaan menjadi aman untuk kembali beroperasi dan/atau dilakukan perbaikan.

in PGN's pipeline network and facilities operations until the condition is safe to resume operations and/or repairs are carried out.

Definisi

- **Crisis Commander**
Crisis Commander adalah salah satu Direktur yang ditunjuk oleh Direktur Utama sebagai penanggung jawab penanggulangan tingkat Keadaan Gawat Darurat Tier 3.
- **Crisis Control Center**
Crisis Control Center (CCC) adalah suatu tempat yang ditetapkan sebagai pusat kendali utama untuk mengendalikan proses penanggulangan Keadaan Gawat Darurat Tier 3.
- **Crisis Management Team**
Crisis Management Team (CMT) adalah tim yang berisikan Pekerja yang ditunjuk oleh manajemen membantu CC untuk menanggapi Keadaan Gawat Darurat Tier 3.
- **Emergency Commander**
Emergency Commander (EC) adalah Pekerja yang ditunjuk oleh manajemen untuk bertanggung jawab memimpin penanggulangan Keadaan Gawat Darurat Tier 2.
- **Emergency Control Center**
Emergency Control Center (ECC) adalah suatu tempat yang ditetapkan sebagai pusat kendali utama penanggulangan Keadaan Gawat Darurat Tier 2.
- **Emergency Management Team**
Emergency Management Team (EMT) adalah Tim yang berisikan Pekerja yang ditunjuk oleh manajemen

Definitions

- **Crisis Commander**
 A Crisis Commander is one of the Directors appointed by the President Director as the person responsible for handling Emergency Condition Tier 3.
- **Crisis Control Center (CCC)**
 The Crisis Control Center is a designated location serving as the main command center to control the handling process of Emergency Condition Tier 3.
- **Crisis Management Team (CMT)**
 The Crisis Management Team is a team consisting of Workers appointed by management to assist the Crisis Commander in handling Emergency Condition Tier 3.
- **Emergency Commander (EC)**
 The Emergency Commander is a Worker appointed by management to be responsible for leading the handling of Emergency Condition Tier 2.
- **Emergency Control Center (ECC)**
 The Emergency Control Center is a designated location serving as the main command center for handling Emergency Condition Tier 2.
- **Emergency Management Team (EMT)**
 The Emergency Management Team is a team consisting of Workers

membantu EC untuk menanggulangi Keadaan Gawat Darurat Tier 2.

- **Gas System Operation**

Gas System Operation (GSO) adalah satuan kerja yang bertugas melaksanakan pengawasan real time pengaliran gas pada wilayah transmisi dan distribusi;

- **Incident Commander**

Incident Commander (IC) adalah Pekerja yang ditunjuk oleh manajemen bertanggung jawab memimpin IMT dalam penanganan Keadaan Gawat Darurat Tier 1;

- **Incident Management Team**

Incident Management Team (IMT) adalah Tim Pekerja dari area tempat terjadinya Keadaan Gawat Darurat untuk menanggulangi keadaan gawat darurat Tier 1;

- **Keadaan Gawat Darurat Tier 1**

Keadaan Gawat Darurat Tier 1 melibatkan cedera ringan atau pembatasan kerja, dampak lingkungan lokal yang bisa ditangani di tempat, kerugian di bawah Rp50 miliar, dan publisitas negatif lokal.

- **Keadaan Gawat Darurat Tier 2**

Keadaan Gawat Darurat Tier 2 melibatkan korban jiwa tunggal atau kasus hilang hari kerja, dampak lingkungan hingga 500 meter, kerugian Rp50–200 miliar, dan publisitas negatif regional.

- **Keadaan Gawat Darurat Tier 3**

Keadaan Gawat Darurat Tier 3 melibatkan lebih dari satu korban jiwa, dampak lingkungan yang melebihi 500 meter, kerugian di atas Rp200 miliar, dan publisitas negatif di skala nasional/internasional.

- **On Scene Commander**

On Scene Commander (OSC) adalah Supervisor yang sedang bertugas

appointed by management to assist the Emergency Commander in handling Emergency Condition Tier 2.

- **Gas System Operation (GSO)**

Gas System Operation is the work unit responsible for real-time supervision of gas flow in transmission and distribution areas.

- **Incident Commander (IC)**

The Incident Commander is a Worker appointed by management responsible for leading the Incident Management Team in handling Emergency Condition Tier 1.

- **Incident Management Team (IMT)**

The Incident Management Team is a team of Workers from the area where the Emergency Condition occurs to handle Emergency Condition Tier 1.

- **Emergency Condition Tier 1**

Tier 1 Emergency Condition involves minor injuries or work restrictions, local environmental impact that can be managed on-site, losses under Rp50 billion, and negative local publicity.

- **Emergency Condition Tier 2**

Tier 2 Emergency Condition involves a single fatality or lost workday cases, environmental impact up to 500 meters, losses of Rp50–200 billion, and negative regional publicity.

- **Emergency Condition Tier 3**

Tier 3 Emergency Condition involves more than one fatality, environmental impact exceeding 500 meters, losses above Rp200 billion, and negative national/international publicity.

- **On Scene Commander (OSC)**

The On Scene Commander is the Supervisor on duty at the time the

pada saat Keadaan Gawat Darurat terjadi, dan merupakan pemimpin *Incident Response Team* di lapangan sebelum *Incident Commander* diaktifkan.

- **Incident Response Team**

Incident Response Team (IRT) adalah tim yang bertugas untuk mengambil langkah-langkah penanggulangan di tempat kejadian dan melakukan tindakan agar kondisi menjadi aman.

Emergency Condition occurs, serving as the leader of the Incident Response Team in the field before the Incident Commander is activated.

- **Incident Response Team (IRT)**

The Incident Response Team is the team responsible for taking countermeasures at the incident site and carrying out actions to ensure conditions become safe.

Struktur Organisasi Penanggulangan Keadaan Gawat Darurat

Dokumen ini menetapkan persyaratan minimum dan struktur organisasi tanggap darurat, termasuk peran Incident Management Team (IMT), Emergency Management Team (EMT), dan Crisis Management Team (CMT) yang mendukung Incident Response Team (IRT) di lapangan. Fokus utamanya adalah pada kecepatan aktivasi, efektivitas komunikasi, mobilisasi sumber daya, serta perlindungan terhadap personel dan aset. Tim tanggap darurat juga bertanggung jawab atas pendanaan, pengelolaan tingkat kedaruratan, kesiapsiagaan 24 jam, dan perencanaan pemulihan. Struktur organisasi bersifat fleksibel dan dapat disesuaikan dengan karakteristik dan risiko bisnis, dengan kemungkinan penambahan atau pengurangan anggota sesuai kebutuhan situasi darurat.

Proses Penanggulangan Keadaan Gawat Darurat

Apabila terjadi Keadaan Gawat Darurat pada jaringan pipa dan fasilitasnya, berikut

Emergency Condition Response Organization Structure

This document establishes minimum requirements and the organizational structure for emergency response, including the roles of the Incident Management Team (IMT), Emergency Management Team (EMT), and Crisis Management Team (CMT), which support the Incident Response Team (IRT) in the field. The main focus is on rapid activation, effective communication, resource mobilization, as well as protection of personnel and assets. The emergency response teams are also responsible for funding, managing emergency levels, 24-hour preparedness, and recovery planning. The organizational structure is flexible and can be adjusted to business characteristics and risks, with the possibility of adding or reducing members as required by the emergency situation.

Emergency Condition Response Process

If an Emergency Condition occurs in the pipeline network and its facilities, the following countermeasures can be taken:

langkah-langkah penanggulangan yang dapat dilakukan:

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| <ol style="list-style-type: none"> 1. Saksi/Pelapor menghubungi Contact Center PGN atau pihak terkait untuk melaporkan keadaan darurat; 2. Gas System Operation mencatat laporan ke log book dan melengkapinya dengan detail kejadian; 3. Gas System Operation menginformasikan kondisi ke OSC dan Incident Commander serta melakukan analisis awal; 4. OSC memimpin tim IRT melakukan penanganan awal di lokasi; 5. Incident Commander melakukan asesmen awal dan memberi info ke Emergency Commander jika ada potensi eskalasi; 6. Incident Commander mendeklarasikan Tier 1 dan mengaktifkan IMT untuk menangani kejadian; 7. OSC melaporkan perkembangan penanganan secara berkala ke Incident Commander dan Gas System Operation; 8. Incident Commander mengevaluasi potensi eskalasi dari Tier 1 ke Tier 2. 9. Incident Commander menghubungi Emergency Commander jika tidak mampu menangani insiden; 10. Emergency Commander menganalisis laporan dan menentukan level Tier 2 atau 3; 11. Emergency Commander mendeklarasikan Tier 2 dan mengaktifkan EMT di ECC; 12. Emergency Commander memimpin penanganan Tier 2 dan berkoordinasi dengan pihak eksternal jika perlu; 13. Emergency Commander mengevaluasi potensi eskalasi dari Tier 2 ke Tier 3; | <ol style="list-style-type: none"> 1. Witness/Reporter contacts PGN Contact Center or related parties to report the emergency; 2. Gas System Operation records the report in the log book and completes it with incident details; 3. Gas System Operation informs the condition to OSC and Incident Commander and conducts initial analysis; 4. OSC leads the IRT team to carry out initial handling at the site; 5. Incident Commander conducts initial assessment and informs the Emergency Commander if there is potential escalation; 6. Incident Commander declares Tier 1 and activates the IMT to handle the incident; 7. OSC reports handling progress periodically to the Incident Commander and Gas System Operation; 8. Incident Commander evaluates potential escalation from Tier 1 to Tier 2; 9. Incident Commander contacts the Emergency Commander if unable to handle the incident; 10. Emergency Commander analyzes the report and determines Tier 2 or 3 level; 11. Emergency Commander declares Tier 2 and activates EMT at the ECC; 12. Emergency Commander leads Tier 2 handling and coordinates with external parties if necessary; 13. Emergency Commander evaluates potential escalation from Tier 2 to Tier 3; |
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| <ul style="list-style-type: none">14. <i>Crisis Commander</i> bersama CMT menganalisis kondisi dan mengaktifkan CCC jika diperlukan;15. <i>Crisis Commander</i> mendeklarasikan Tier 3 jika sesuai kriteria;16. <i>Crisis Commander</i> memimpin penanganan dan pemulihan Tier 3 bersama EMT dan pihak eksternal;17. Pimpinan tanggap darurat mencabut status darurat jika kondisi aman dan semua tujuan tercapai;18. Pimpinan tanggap darurat menyiapkan laporan tertulis dan menyampaikannya kepada pemangku kepentingan eksternal terkait, selambat-lambatnya 1 x 24 jam setelah penanganan selesai dilaksanakan dengan menggunakan Formulir Laporan Keadaan Darurat. | <ul style="list-style-type: none">14. Crisis Commander with the CMT analyzes the condition and activates the CCC if necessary;15. Crisis Commander declares Tier 3 if criteria are met;16. Crisis Commander leads Tier 3 handling and recovery together with EMT and external parties;17. Emergency response leadership lifts the emergency status if the condition is safe and all objectives are achieved;18. Emergency response leadership prepares a written report and submits it to relevant external stakeholders, no later than 1 x 24 hours after completion of handling, using the Emergency Condition Report Form. |
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Kesimpulan

Pedoman ini menetapkan sistem penanggulangan keadaan gawat darurat yang cepat, efektif, dan terkoordinasi di seluruh area operasi dan proyek, dengan struktur tim tanggap darurat (IRT, IMT, EMT, CMT), prosedur berjenjang, dan simulasi rutin, guna melindungi personel, aset, lingkungan, serta kelangsungan bisnis.

Referensi

Referensi yang digunakan dalam penyusunan pedoman ini antara lain:

1. Undang-undang Nomor 1 Tahun 1970 Tentang Keselamatan Kerja;
2. Undang-undang Nomor 22 Tahun 2001 Tentang Minyak dan Gas Bumi;
3. Peraturan Pemerintah Nomor 11 Tahun 1979 Tentang Keselamatan Kerja Pada

Conclusion

This guideline establishes an emergency condition handling system that is rapid, effective, and coordinated across all operational areas and projects, with an emergency response team structure (IRT, IMT, EMT, CMT), tiered procedures, and regular simulations, to protect personnel, assets, environment, and business continuity.

References

The references used in preparing this guideline include:

1. Law Number 1 of 1970 on Occupational Safety;
2. Law Number 22 of 2001 on Oil and Natural Gas;
3. Government Regulation Number 11 of 1979 on Occupational Safety in Oil and Gas Refining and Processing;

- Pemurnian dan Pengolahan Minyak dan Gas Bumi;
4. Peraturan Pemerintah Nomor 36 Tahun 2004 Tentang Kegiatan Usaha Hilir Minyak dan Gas Bumi;
 5. Peraturan Pemerintah Nomor 50 Tahun 2012 Tentang Penerapan Sistem Manajemen Keselamatan dan Kesehatan Kerja;
 6. Peraturan Menteri Pertambangan dan Energi Nomor 300.K/38/M.PE/1997 tentang Keselamatan Kerja Pipa Penyalur Minyak dan Gas Bumi;
 7. Peraturan Kepala Kepolisian Republik Indonesia Nomor 7 Tahun 2019 Tentang Pemberian Bantuan Pengamanan Pada Objek Vital Nasional dan Objek Tertentu;
 8. Keputusan Menteri Tenaga Kerja RI No.Kep.186/Men/1999 tentang Unit Penanggulangan Kebakaran di tempat Kerja;
 9. Peraturan Menteri Tenaga Kerja Dan Transmigrasi Republik Indonesia Nomor: PER.15/MEN/VIII/2008 tentang Pertolongan Pertama Pada Kecelakaan di Tempat Kerja;
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 11. Pedoman Sistem Dokumentasi PT. Perusahaan Gas Negara Tbk. No. P-002/0.58;
 12. Pedoman Penanggulangan Keadaan Gawat Darurat PT. Perusahaan Gas Negara Tbk. No. P-003/OA018;
 13. Keputusan Direksi PT Perusahaan Gas Negara Tbk Nomor 000101.K/KK/PDO/2021 tanggal 4 Januari 2021 Tentang Penetapan Jabatan Crisis Commander, Emergency Commander dan Incident
 4. Government Regulation Number 36 of 2004 on Downstream Oil and Gas Business Activities;
 5. Government Regulation Number 50 of 2012 on Implementation of Occupational Safety and Health Management System;
 6. Minister of Mining and Energy Regulation Number 300.K/38/M.PE/1997 on Occupational Safety of Oil and Gas Transmission Pipelines;
 7. Regulation of the Chief of the Indonesian National Police Number 7 of 2019 on Provision of Security Assistance for National Vital Objects and Certain Objects;
 8. Decree of the Minister of Manpower of the Republic of Indonesia No. Kep.186/Men/1999 on Firefighting Units in the Workplace;
 9. Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number PER.15/MEN/VIII/2008 on First Aid in Workplace Accidents;
 10. Safety, Health, Security, and Environmental Management System Guideline, PT Perusahaan Gas Negara Tbk. No. P001/0.51;
 11. Documentation System Guideline, PT Perusahaan Gas Negara Tbk. No. P-002/0.58;
 12. Emergency Condition Handling Guideline, PT Perusahaan Gas Negara Tbk. No. P-003/OA018;
 13. Decree of the Board of Directors of PT Perusahaan Gas Negara Tbk Number 000101.K/KK/PDO/2021 dated January 4, 2021 on Appointment of Crisis Commander, Emergency Commander, and Incident Commander in Emergency Conditions within PT Perusahaan Gas Negara Tbk;

Commander Pada Keadaan Gawat Darurat di Lingkungan PT Perusahaan Gas Negara Tbk;

14. ISO 14001 tentang Standar Sistem Manajemen Lingkungan;
15. ISO 45001 tentang Standar Sistem Manajemen Keselamatan dan Kesehatan Kerja;
16. Sustainability Pertamina Expectations for HSSE Management Excellence (SUPREME);
17. Pertamina Security Risk Management (PSRM).

14. ISO 14001 on Environmental Management System Standard;
15. ISO 45001 on Occupational Safety and Health Management System Standard;
16. Pertamina Sustainability Expectations for HSSE Management Excellence (SUPREME);
17. Pertamina Security Risk Management (PSRM).