

## **Advisory to Industrial Establishments for making Industrial Cylinders available.**

As you are aware that Jharkhand is currently witnessing the daily increasing number of Covid-19 positive cases and due to increase in the caseload, high proportion of patients are on supplemental Oxygen which has led to a substantial increase in Medical Oxygen requirements in various Covid-19 health establishments across the State. Hence with the increasing number of patients and hospital beds, there is emergent need to supplement additional supply of medical Oxygen through both Medical as well as Industrial cylinders. As we understand that to meet the requirement of oxygen demand for these increasing number of patients, all available medical cylinders in the state may not be adequate.

A significant proportion of Covid-19 positive patients is being treated by various Private hospitals operating in the entire state. Therefore, it is advised to all large, medium and small industrial establishments operating in the state to kindly make Industrial cylinders available with them to these private hospitals on the basis of mutually agreed commercial terms and conditions so that the gap between demand and availability of oxygen cylinders with the private hospitals is fulfilled in the interest of patients in this pandemic **without diverting the Industrial cylinders already requisitioned by the undersigned under Disaster Management Act 2005**. Further, it is advised to keep sufficient number of Industrial cylinders ready for meeting the demand for government hospitals whenever needed.

Petroleum and Explosive Safety Organisation (PESO), Government of India vide circular no. D-21013/PBL/18-Exp dated 22.04.2021 (Copy enclosed) has issued SOP for converting these Industrial Cylinders into Medical Cylinders.

Therefore, in view of the above it is requested to all the industrial establishments located in the state to make these Industrial cylinders available to the needy private hospitals by following the SOP as referred above and also after fulfilling all other necessary regulatory and legal compliances in order to use industrial cylinders for medical purpose.

All Private hospitals are also requested to coordinate with the concerned industrial establishment for the above.

Date:01.05.2021



Director Industry  
Oxygen Task Force, Jharkhand



भारत सरकार

GOVERNMENT OF INDIA

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन

Petroleum and Explosives Safety Organisation

(पूर्व नाम - विस्फोटक विभाग)

(Formerly- Department of Explosives)

"ए-ब्लॉक 4, पाँचवा तल, केन्द्रीय कार्यालय परिसर,

"A" Block, 5<sup>th</sup> Floor, CGO Complex,

सेमिनरी हिल्स, नागपूर - 440 006 (महा)

Seminary Hills, Nagpur- 440006

Website : <http://peso.gov.in>  
Email: [explosives@explosives.gov.in](mailto:explosives@explosives.gov.in)  
दूरभाष/ Telephone : 0712-2510248  
फैक्स/ FAX : 2510577

कार्यालयीन उद्देश्य के सभी पत्रादि "मुख्य विस्फोटक नियंत्रक" के पदनाम से भेजे जाएं उनके व्यक्तिगत नाम से नहीं।

All communications intended for this Office should be addressed to the 'Chief Controller of Explosives' and NOT to him by name.

संख्या: D-21013/PBL/18-Exp

दिनांक /Nagpur, dated : 22/04/2020

**CIRCULAR**

Sub: Standard Operating Procedures (SOP) for conversion of Industrial Oxygen Cylinders and Inert Gas Cylinders (Nitrogen, Argon & Helium only) to Medical Oxygen Cylinders in the wake of COVID-19 pandemic- reg.

In wake of the outbreak of the COVID-19 pandemic in the country and to ensure uninterrupted supply of Oxygen to hospitals and other health care facilities; DPIIT, Ministry of Commerce and Industry, Government of India has advised PESO to formulate a Standard Operating Procedure for conversion of Industrial oxygen cylinders and Non toxic Non flammable Gas Cylinders (Nitrogen, Argon and helium).

The Industrial gas cylinders Filling Units covered under License Form E & F of the Gas Cylinders Rules, 2016 may convert their industrial and inert gas cylinders to Medical Oxygen Cylinders in their endeavor of national interest.

A copy of the SOP is enclosed herewith. It shall be obligatory to adopt Standard Operating Procedure (SOP) during the conversion.

The copy of the same is made available in PESO's website:  
<https://peso.gov.in/index.aspx>.

(M.K. Jhala)

Jt. Chief Controller of Explosives (H.O.D.)

To:

1. Shri R.K. Sood, Deputy Secretary Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Udyog Bhavan, New Delhi: 110 107: For information.
2. Heads of Circle and Sub Circle Offices of PESO and Nodal Officers of PESO: They are advised to give wide publicity about the Circular and SOP
3. The President, All India Industrial Gases Manufacturers Association, 215, Square One, C-2 District Centre, Saket, New Delhi: 110 017: He is advised to inform the gas cylinder filling plants and persuade for conversion of cylinders duly adhering to the SOP.
4. All the Nodal Officers monitoring the inventory of Oxygen and Gas Cylinders: They are advised to note and take necessary action

**S O P for conversion of Industrial Oxygen Cylinders to Medical Oxygen**

Following procedure is required to be adopted for conversion of Industrial oxygen cylinders to medical oxygen service.

1. Cylinder shall be completely degassed.
2. Removal of Valve and cleaned with cleaning solution, completely dry and flush with air.
3. Cleaning of cylinder internally as well as externally with mild detergent and completely de-grease with cleaning solution (May refer ISO 11621). *Organic solvents like carbon tetra chloride should not be used being toxic.*
4. Cylinders shall be again filled with water/warm water.
5. Drain and dry with air.
6. During the COVID-19 crisis Industrial Oxygen valves (without chrome plating) may be used and fitted.
7. The cylinder shall be painted as required for medical oxygen( IS 3933)
8. For any details please refer ISO 11621.
9. The cylinders may be converted only at E and F licensed premises.
10. Record of converted cylinders shall be maintained in the following format and intimate on mail to [seenraj@explosives.gov.in](mailto:seenraj@explosives.gov.in)

License No.( E and F)

Cylinder No.	Make	Water capacity	Last Hydrotest date	Valves code/chrome plated Yes/No

**SOP for conversion of non toxic and non flammable high pressure industrial gas cylinders i.e Argon, Nitrogen and Helium to cylinders for medical oxygen service during COVID-19 Pandemic.**

Following procedure is required to be adopted for conversion:

I. The Cylinders shall be completely degassed, adequately cleaned from inside and outside, purged and/or evacuated to remove any contaminations like water, oil, hydrocarbons etc., if any after degassing and safe removal of valve. Refer to ISO 11621 for detailed cleaning procedures. Organic solvents like Carbon Tetra Chloride shall not be used as they are toxic.

II. Ensure that the cylinders have passed last cylinder periodic examination/re-test as per Rule 26 of the Gas Cylinders Rules, 2016. However, the periodic testing of cylinders is extended from 5 years to 5 years 3 Months for those cylinders which are due for statutory hydro testing on 31.03.2020 because of the ongoing COVID-19 pandemic and shall be reverted to 5 years once the Government of India declares that the pandemic is over. The extension of cylinder retest is also applicable to industrial Oxygen cylinders used in medical Oxygen service. The records of such cylinders shall be maintained.

III. Cylinders shall be fitted with appropriate valves according to the medical gas in line with IS:3224. In this case, change valve with IS 3224 No.20 (3/4 BSP RH External thread) to IS outlet No.3 (5/8 BSP, RH, internal thread) for Oxygen. During the COVID-19 crisis industrial oxygen valves (without chrome plating) may be fitted and used in medical oxygen service since the outlets are identical. Where yoke type valves are needed to be installed for small cylinders, it shall be according to IS 3745.

IV. Colour-code of cylinders and warning labels shall be according to "IS 3933: Colour identification of gas cylinders and related equipment intended for medical use". This is also applicable to industrial oxygen cylinders which are converted to medical Oxygen service.

V. These activities shall be carried at the E&F licensed premises only.

VI. The records of such converted cylinders shall be maintained.

VII. Record of converted cylinder shall be maintained in the following format and intimated on mail to [seeniraj@explosives.gov.in](mailto:seeniraj@explosives.gov.in).

Cylinder Filling & Storage license No.

Cylinder Sr.No	Make	Water capacity in (in litres)	Existing service (Argon/Nitrogen/Helium)	Last Hydrotest date	Valve code-Chrome plated (Yes/no)

To,

**1. President**

Federation of Jharkhand Chamber of Commerce & Industries  
Main Road Chamber Path Chamber Bhawan, Jharkhand 83400

**2. President**

Jharkhand Small Scale Industries Association  
Udyog Bhavan, Koker Industrial Area Ranchi-834001

**3. President**

Adityapur Small Industries Association,  
M-5(P), Adityapur-Kandra Road,  
Adityapur Industrial Area,  
Jamshedpur.

**4. President**

Singhbhum Chamber of Commerce & Industry  
Chamber Bhawan, Bistupur,  
Main Road, Jamshedpur - 831001

**5. President**

Singhbhum Industries Association  
Ramgariah Sabha, Tapti Road, Sakchi,  
Jamshedpur-831001

**6. President**

Saraikela Kharsawan District Chamber  
of Commerce & Industry, Saraikela  
Dist: Singhbhum (East)

**7. President**

Small Scale Industries Association  
Chakulia, East Singhbhum

**8. President**

Chaibasa Chamber of Commerce & Industries, Sadar Bazar,  
Dist: Chaibasa

**9. President**

Industries and Commerce Association  
ICO Association Road, Shakti Mandir-  
Path, Dist: Dhanbad

**10. President**

Bank More Chamber of Commerce,  
Katrass Road, Dist: Dhanbad.

**11. President**

Dhanbad Zila Chamber of Commerce & Industries,  
Dist: Dhanbad

**12. President**

Jharkhand Industries Association,  
C-5, Central Market, Sector-3,  
Bokaro Steel City, Bokaro-827003

**13. President**

Bokaro Chamber of Commerce & Industries,  
Bypass Road, Chas,  
Dist: Bokaro

**14. President**

Jainamore Chamber of Commerce  
Chas, Dist.: Bokaro

**15. President**

Jharkhand Small Tiny Service & Business Enterprises Association,  
Hind Market Near Hotel Yamuna Villa,  
Check Post, Chas,  
Dist: Bokaro - 827013

**16. President**

Madhupur Chamber of Commerce & Industries  
P.O. - Madhupur,  
Dist: Deoghar

**17. President**

Santhal Pargana Small Industries Association,  
Near DAV School, Caster Town,  
Dist: Deoghar – 814112

**18. President**

Santhal Pargana Chamber of Commerce & Industries,  
Jhousagarhi, Dumka Road, Dist: Deoghar - 814112

**19. President,**

Jharkhand Small & Tiny Industries Association,  
Shaheed Ashram Road,  
Baidyanath, Dist: Deoghar – 814112

**20. President**

North Jharkhand Chamber of Commerce & Industries,  
Jasidih, Dist: Deoghar

**21. President**

Jamtara Chamber of Commerce & Industries,  
Dist: Jamtara

**22. President**

Chamber of Commerce & Industries  
C/o Sri Gopal Industries, New Town,  
Jamtara, Dist: Jamtara – 81535

**23. President**

Sahebganj Chamber of Commerce &  
Industries, Dist: Sahebganj

**24. President**

Eastern Jharkhand Chamber of Commerce & Industries,  
Dist: Sahibganj

**25. President**

Giridih District Chamber of Commerce  
Saluja House, Netaji Chowk,  
Dist: Giridih

**26. President**

Pakur Chamber of Commerce  
Dist: Pakur

**27. President**

Godda Chamber of Commerce &  
Industries, Guljarbagh, Kalali More,  
Hatia Chowk, Dist: Godda

**28. President**

Dumka Chamber of Commerce &  
Industries, Dist: Dumka

**29. President**

Ramgarh Chamber of Commerce &  
Industries, Bijulia, Ramgarh,  
Dist: Ramgarh

**30. President**

Chatra Chamber of Commerce & Industries,  
Main Bazar, Dist: Chatra

**31. President**

North Chotanagpur Chamber of Commerce & Industries,  
Badam Bazar,  
Gola Road, Dist: Hazaribagh

**32. President**

Hazaribagh Chamber of Commerce Industry  
C/o Gupta Steel of Metal- Works  
Nababganj, Dist: Hazaribagh

**33. President**

Associated Chamber of Trade & Industry,  
M/s Singhanian Traders  
Ranchi Patna Road, Jhumritalaiya, Dist: Kodarma

**34. President**

Simdega Chamber of Commerce & Industries,  
Main Road Simdega Dist: Simdega

**35. President**

Palamu Chamber of Commerce &  
Industries, Pradip Kunj Seva Sadan,  
Daltonganj, Dist: Palamu

**36. President**

Palamu Jila Vyawasay Sangh  
Daltonganj, Dist: Palamu

**37. President**

Lohardaga Chamber of Commerce  
Dist: Lohardaga

**38. President**

Latehar Chamber of Commerce &  
Industries, Thana Chowk,  
Dist: Latehar

**39. President**

Garhwa Chamber of Commerce &  
Industries, Dist: Garhwa

**40. President**

Gumla Chamber of Commerce  
C/o Uma Shankar Saw Mill,  
Dist: Gumla

**41. President**

HEC Ancillary Industries Association  
Tupudana, Ranchi

**42. President**

Laghu Udyog Bharati  
Birsa Nagar Near Birsa Chowk,  
Hatia, Ranchi

**43. Secretary**

CCL, Ancillary Industries Association  
RIADA Building, Main Road, Ranchi

**44. President**

Tecno Entrepreneurs Association  
BIT STEP, Mesra, Ranchi



**45. President**

Laghu Udyog Bharati  
M/s Aditya Foods NS-123, Industrial Area, Adityapur, Jamshedpur 831013

**46. President**

Laghu Udyog Bharati  
Ranchi District, Ranchi  
Jharkhand

**47. President**

Confederation of Indian Industry (CII)  
169, Old A G Colony, Kadru, Ashok Nagar, Ranchi, Jharkhand 834002

**48. President**

PHD Chamber of Commerce & Industries  
Ranchi

**49. President**

ASSOCHAM,  
503/D, Mandir Marg B, Ashok Kunj, Ashok Nagar  
Ranchi, Jharkhand 834002

**50. President**

Tribal Indian Chamber of Commerce & Industries  
5 A, Ramdev Bagan, Opposite Radha Swami Satsang  
Golmuri, Jamshedpur, Jharkhand, India, 83100

**51. President**

Dalit Chamber of Commerce & Industries  
Jharkhand

**52. President**

UDDYAM SHAKTI  
Jharkhand

**53. President**

Jharkhand Refractories Mfgs. Association,  
C/o Hotel Sunny, P.O. Chirkunda-828202, Dist: Dhanbad.

**54. President**

Rice Mill Association  
Jharkhand

55. All Private Hospitals

56. All Deputy Commissioners, Jharkhand for information and necessary action.

57. Mission Director, National Health Mission, Jharkhand for information and necessary action.