

FATAL ENCLOSED SPACE ENTRY

Toxic exposure during ballast tank painting kills one seafarer, hospitalises another off the Estonian coast

One crew member has died and a second remains hospitalised after both were overcome inside a ballast tank during routine painting work — a fresh reminder that enclosed space entry tolerates no shortcuts.

VERIFICATION NOTE

This incident occurred only two days before issue and no official investigation report is yet available. Confirmed facts below — the date, location, cause (toxic exposure following ballast tank painting), and casualty outcome (1 death, 1 hospitalised, both Indian nationals aged 26 and 25) — are drawn from Estonia's public broadcaster ERR News and a statement by the Police and Border Guard Board (PPA) duty officer, and are corroborated by a second independent report. **The vessel's name and IMO number have NOT been officially confirmed** by Estonian authorities or any operator. The incident brief supplied for this circular cited IMO 9283655; public vessel registries show that number belongs to an unrelated dry bulk carrier and does not match this incident. A tanker named *Chrystal Sky* (IMO 9334569, Marshall Islands flag) is consistent with the reported vessel type and flag, but this identification remains unconfirmed pending an official statement and should be treated as preliminary. This circular will be reissued if the investigating or flag state authority publishes different findings.

01 — EXECUTIVE SUMMARY

On 7 July 2026, at approximately 10:52 local time, two Indian seafarers were taken ill shortly after carrying out painting work inside a ballast tank aboard a tanker operating in international waters near Vaindloo Island, in Estonia's exclusive economic zone in the Gulf of Finland. Both men became unwell soon after entering the tank; one lost consciousness. Estonia's Police and Border Guard Board (PPA) dispatched a rescue helicopter, which reached the vessel within roughly 30 minutes. A rescue specialist winched onto the ship confirmed that a 26-year-old Indian seafarer had died. A second Indian seafarer, aged 25, remained conscious and was airlifted to a hospital in Tallinn. Initial reports have referred to the vessel as the Marshall Islands-flagged tanker *Chrystal Sky*, though this identification has not been officially confirmed at the time of writing. This tragic incident is a stark reminder that enclosed space entry — including short, seemingly routine tasks such as painting — remains one of the most persistent killers in our industry, and that atmosphere testing, ventilation, and permit-to-work discipline are non-negotiable, every time.

AT A GLANCE**VESSEL**

Reported as "Chrystal Sky"
(unconfirmed)

TYPE

Oil products tanker

FLAG

Marshall Islands

LOCATION

Near Vaindloo Island, Gulf of
Finland

OPERATION

Painting inside a ballast tank

CASUALTIES

1 fatality, 1 hospitalised

02 — WHAT HAPPENED

- On the morning of 7 July 2026, two crew members were tasked with painting the interior of a ballast tank while the vessel was in international waters near Vaindloo Island, Gulf of Finland, within Estonia's exclusive economic zone.
- Shortly after entering the tank and beginning painting work, both crew members began feeling unwell.
- One crew member lost consciousness; the other remained conscious but was also affected and required urgent medical attention.
- At approximately 10:52 local time, the alarm was raised and Estonia's rescue coordination authorities were notified.
- The Police and Border Guard Board (PPA) dispatched a rescue helicopter with medical personnel, reaching the vessel within approximately 30 minutes.
- A rescue specialist was lowered onto the vessel by hoist. The first crew member was found with an extremely weak pulse and was confirmed dead at the scene.
- The second crew member remained conscious and was airlifted from the vessel to a hospital in Tallinn for treatment.
- Both casualties were Indian nationals: the deceased was 26 years old; the hospitalised seafarer was 25.
- No details of the tank's atmosphere testing, ventilation arrangements, or permit-to-work status prior to entry have been made public at the time of writing.

"We were informed that painting work had been carried out inside the vessel's ballast tank, after which two crew members began feeling unwell."

— PPA DUTY OFFICER ANASTASSIA DATS, ERR NEWS

03 — IMMEDIATE CAUSES

- Preliminary indications — based on the reported task and the crew's symptoms — point to a toxic and/or oxygen-deficient atmosphere inside the ballast tank, most likely arising from paint vapours in a poorly ventilated enclosed space. This has not yet been officially confirmed by an investigation.
- Entry into an enclosed space to carry out painting work, apparently without atmosphere testing having been confirmed as satisfactory beforehand (not yet officially established).
- No confirmed continuous mechanical ventilation of the tank before or during the painting work (not yet officially established).

04 — ROOT CAUSES

No investigation report has yet been published for this incident, so root causes specific to this vessel cannot be confirmed. The points below reflect the systemic failures most commonly associated with enclosed space fatalities of this type across the industry, offered here for onboard reflection — not as confirmed findings for this incident.

- Enclosed space entry carried out without a valid, signed Permit to Work.
- Atmosphere not tested (oxygen, flammable and toxic gas) before entry, or tested only at the entrance and not throughout the space.
- No continuous mechanical ventilation running before and during entry.
- No dedicated attendant stationed at the entrance with constant communication with those inside.
- Rescue and resuscitation equipment not immediately available at the space.
- Painting-specific hazards — solvent vapour build-up in a confined space with limited natural ventilation — not adequately addressed in the job risk assessment.

05 — CONTRIBUTING FACTORS

- Solvent-based paints can rapidly deplete oxygen and release toxic or flammable vapours in a confined space with limited air exchange.
- Ballast tanks are classified enclosed spaces with a known history of oxygen deficiency, even when apparently empty and ventilated.
- Painting work carried out while at sea may receive less rigorous pre-entry checks than planned in-port maintenance.
- Two persons entering together without a dedicated outside attendant reduces the chance of early detection and rescue.

06 — CONSEQUENCES

- One fatality: a 26-year-old Indian seafarer.
- One serious casualty requiring hospitalisation: a 25-year-old Indian seafarer; airlifted to Tallinn.
- Emergency search-and-rescue helicopter response involving Estonian state authorities.
- Profound emotional impact on the vessel's crew and the seafarers' families.
- Vessel operations disrupted during the emergency response.
- Expected regulatory attention from flag state and port state control given the fatality.

07 — LESSONS LEARNED

- Enclosed space entry remains one of the leading causes of multiple-fatality incidents at sea — a "routine" painting job is still an enclosed space entry and must be treated with full rigour every time.
- Fumes from paint and other chemicals can incapacitate a person within seconds in a poorly ventilated space — there may be no warning before collapse.
- Rushing in to help a collapsed colleague without breathing apparatus is a leading cause of second and third casualties; a trained, equipped rescue response is essential.
- Painting inside tanks and other enclosed spaces must always be planned and risk-assessed as an enclosed space entry, not simply as routine "maintenance."
- Every enclosed space entry needs an attendant outside, constant communication, and a means of rapid rescue — no exceptions, regardless of how quick the job is expected to be.

08 — PREVENTIVE MEASURES

8.1 BEFORE THE JOB

- Classify every ballast tank, cargo hold, void space, and similar compartment as an enclosed space by default — never assume a space is safe because it was recently opened or ventilated.
- Obtain and complete a valid Enclosed Space Entry Permit before any person enters, including for painting, inspection, or "quick" tasks.
- Test the atmosphere (oxygen, flammable gas, and toxic gas/vapour appropriate to the paint or solvent in use) at multiple levels and locations before entry.
- Run mechanical ventilation for the period specified in the vessel's procedures before entry, and keep it running throughout the work.
- Conduct a task-specific risk assessment and toolbox talk covering the paint or solvent being used, ventilation arrangements, and emergency response.

- Brief and station a dedicated, trained attendant at the entrance for the entire duration of the entry, with a functioning means of communication.
- Stage rescue and resuscitation equipment at the entrance before work begins.

8.2 DURING THE JOB

- Maintain continuous communication between those inside the space and the attendant outside.
- Stop work immediately if anyone feels dizzy, nauseous, short of breath, or unusually tired, and evacuate the space.
- Never enter an enclosed space to rescue a collapsed colleague without breathing apparatus and a trained rescue team — raise the alarm first.
- Re-test the atmosphere periodically, and immediately if conditions, ventilation, or the work being done changes.
- Keep the space ventilated throughout the entire duration of the work, not only before entry.

8.3 AFTER THE JOB

- Log the entry, atmosphere readings, and ventilation times in the vessel's enclosed space entry register.
- Debrief the team on any near misses, symptoms, or concerns raised during the job.
- Report this incident and its lessons at the next shipboard safety meeting and toolbox talk, fleet-wide.
- Review and, if necessary, update the vessel's list of designated enclosed spaces and associated risk assessments.

8.4 MANAGEMENT ACTIONS

- Reissue fleet-wide instructions that painting inside any tank or void space is an enclosed space entry requiring a full permit-to-work, without exception.
- Verify that all vessels carry functioning, calibrated multi-gas detectors and that crew are trained and confident in their use.
- Confirm enclosed space entry and rescue drills are conducted at the required frequency and are genuinely hands-on.
- Review provision and stowage of emergency escape breathing devices (EEBDs) and resuscitation equipment near frequently entered enclosed spaces.
- Reinforce a Just Culture in which crew feel able to stop work or delay a task rather than enter a space they are unsure about.
- Extend condolences and support to the affected seafarers' families and provide welfare support to the vessel's crew.

09 — KEY SAFETY MESSAGES

✓ An enclosed space can kill in seconds — there is often no warning before collapse.	✓ A single point of failure can defeat more than one safety system at once.
✓ Painting inside a tank is an enclosed space entry, every time, with no exceptions.	✓ Test the atmosphere before you go in — and test it again if you're in there a while.
✓ Never enter to rescue a collapsed colleague without breathing apparatus — you will become the second casualty.	✓ Always post a trained attendant outside, with constant communication, before anyone enters.
✓ If you feel dizzy, nauseous, or short of breath — get out immediately and raise the alarm.	✓ Ventilate before entry, and keep ventilating throughout the job.
✓ A valid Permit to Work is not paperwork — it is what keeps you alive. ✓ Every life lost in an enclosed space was preventable — look out for your shipmates.	

10 — DISCUSSION QUESTIONS FOR ONBOARD SAFETY MEETINGS

1. Do we treat every ballast tank and void space entry as an enclosed space entry, even for "quick" jobs like painting?
2. Is our atmosphere-testing equipment onboard, calibrated, and are all watchkeepers confident using it?
3. Do we always post a dedicated attendant outside an enclosed space, with reliable communication, for the whole duration of entry?
4. What ventilation arrangements do we use before and during tank painting, and for how long before we consider a space safe to enter?
5. If a colleague collapsed inside an enclosed space right now, what exactly would you do in the first 60 seconds?
6. Do we have emergency escape breathing devices and rescue equipment readily available near spaces that are entered regularly?
7. Would every crew member on this vessel feel comfortable stopping a job if unsure about the safety of an enclosed space?
8. When did we last carry out a realistic enclosed space rescue drill, including actually using the rescue equipment?

11 — SAFETY MEETING ACTION ITEMS

ACTION	RESPONSIBLE
Confirm enclosed space entry permits and atmosphere testing are completed, without exception, for every ballast tank/void entry including painting.	Master / Chief Officer
Verify all gas detection equipment onboard is present, in date, and calibrated.	Chief Officer
Confirm a trained attendant and rescue equipment are posted at every enclosed space entry.	Chief Officer / Master
Schedule a hands-on enclosed space rescue drill within the required interval.	Master
Brief all crew on this incident and reinforce the fleet's enclosed space entry procedures.	Master / DPA

SAFETY MESSAGE

This week, a shipmate did not come home. A routine painting job inside a ballast tank became a fatal enclosed space incident within minutes — a reminder that there is no such thing as a "quick" or "simple" entry into an enclosed space. Test the atmosphere. Post your attendant. Never go in without breathing apparatus to help someone who has collapsed. Look out for each other, stop the job if something feels wrong, and make sure every entry, every time, is done by the book. Our thoughts are with the family, friends, and shipmates of the seafarer who lost his life, and we wish his colleague a full and speedy recovery.