

INTERNATIONAL INSTITUTE OF SPACE LAW
OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION

INSTITUT INTERNATIONAL DE DROIT SPATIAL
DE LA FEDERATION ASTRONAUTIQUE INTERNATIONALE

THE 2003 MANFRED LACHS SPACE LAW MOOT COURT COMPETITION

INTERNATIONAL COURT OF JUSTICE

SPECIAL AGREEMENT

BETWEEN

THE REPUBLIC OF VESTA
(APPLICANT)

AND

THE PRINCIPALITY OF CERES
(RESPONDENT)

JOINTLY NOTIFIED TO THE COURT ON 22 NOVEMBER 2043

COUR INTERNATIONALE DE JUSTICE

COMPROMIS

ENTRE

LA REPUBLIQUE DE VESTA
(REQUÉRANT)

ET

LA PRINCIPAUTÉ DE CERES
(RÉPONDANT)

NOTIFIÉ CONJOINTEMENT À LA COUR LE 22 NOVEMBRE 2043

CASE CONCERNING THE MINERAL EXPLOITATION OF BOŽNĚMCOVÁ AND RELATED INCIDENTS

Vesta v Ceres

STATEMENT OF FACTS

1. It is the year 2040.
2. The Principality of Ceres was an industrialised coastal State with a population of 25 million. The Republic of Vesta was a predominantly agricultural landlocked State with a population of 37 million that was originally part of neighbouring Ceres but seceded peacefully on 2 May 2014 after a plebiscite. The original Ceresan lunar colony located in the Sea of Tranquillity was divided between Ceres and Vesta on the same date, with the Ceresan half referred to as “Lunar Ceresia” and the Vestan half as “New Vesta”. The Ceresan Government had been a strong supporter of the international campaign against terrorism, led by the United States since 2001, while Vesta had maintained its neutrality.
3. Astermine Aerospace Engineering, Inc. (“**Astermine**”) was a company incorporated in 2017 in the Federal Islands of Boranatu, a Pacific island nation with a reputation as a tax haven. Since 2025, rising oceans resulting from global warming caused many Boranatuans to resettle as “environmental refugees” in a number of countries, including Ceres and Vesta. The Boranatuans Resettlement Agency, funded by the Ceresan Government, was based in the Ceresan capital of Salmonella. Its primary activity being to act as a coordination and welfare agency for the refugees in Ceres and its neighbouring countries, including Vesta. In Ceres, Boranatuans enjoy full citizenship and rights, but this was not the case in Vesta, where they are naturalised citizens but also subjected to social and economic discrimination. The treatment of Boranatuans in Vesta has been the subject of repeated reports of the Human Rights Commission and the Economic and Social Council of the United Nations.
4. Astermine operated as a registered foreign corporation in Ceres. Under Section 19A of the *Companies Ordinance 2017*, registered foreign corporations are subject to regulation by the Ceresan Corporate Commission as if they are local corporations incorporated in Ceres and are taxed for profits derived from activities in Ceres.
5. Astermine was the largest firm in the Ceresan space industry and was 100% owned by Vestan private interests (most of them Boranatuans who became naturalised Vestans). Astermine received research funding from the National Aeronautics and Space Research Agency (“**NASRA**”) of Ceres that, over the past six years, contributed to 60% of its research and development costs.
6. In 2024, the flyby probe *Tombaugh*, a joint project of NASRA and Astermine that was launched from the space station *ISS Beta*, undertook spectral and mineralogical studies on four large asteroids: Atmos, Božněmcová, Eros and Vesta. It was confirmed through this mission that Božněmcová was rich in olivine, pyroxene, iron and nickel. It was revealed that Božněmcová also contained rich deposits of palladium ores and helium-3 deposits, both precious resources that were previously not known to exist on Božněmcová. The results of these studies were published in scientific e-journals and were available from both NASRA and Astermine’s broadband web portals.

7. In 2026, prompted by a world shortage of palladium, Astermine began construction of a robotic mining facility spacecraft, the *Božněmcová Miner*, in low Earth orbit with components launched from the Earth and assembled in space by Astermine engineers stationed on *ISS Gamma*. It was powered by solar panels and a rechargeable chemical battery (which was recharged only by the solar panels) but its propulsion system was a mixture of chemical thrusters and a newly-developed nuclear engine designed specifically for interplanetary systems.
8. The construction of the components of the *Božněmcová Miner* was done in-house at Astermine facilities in Ceres. Upon completion they were there transported to Serratis, a developed country bordering Vesta. The ground control facility for these launches was located in Vesta. The launch vehicle was a Ceresan commercial reusable launch vehicle. The launch facility used was owned by Astermine and located in territory leased by Serratis to Ceres for 99 years, which began in 2023. There were 71 launches scheduled for the construction of the *Miner*.
9. On 31 July 2028, one of the launches, designated with mission number BM-52, was unsuccessful. The reusable launch vehicle used by Astermine lost communications with the ground control facility and plummeted into Botulisia, the capital of Vesta, destroying the 31-storey headquarters of the Vestan Police and Justice Department as well as several surrounding buildings, causing over US\$638 million damage and the loss of 231 lives.
10. Outraged by the tragedy, the Vestan Government ordered a full investigation, with which Astermine cooperated. It was soon discovered that the cause of the failure was human error and the two mission control engineers that were found negligent were both Boranatuans with ties to the Boranatuan Resettlement Agency in Ceres. The reason why the trajectory of the launch vehicle was over Botulisia was that the Vestan Airspace Command had provided Astermine with incorrect coordinates on its flight path clearance.
11. Convinced nevertheless that it was a deliberate act of terrorism on the part of Boranatuans, Vesta sent troops to occupy the launch facility used and detained the Boranatuan staff of Astermine at the facility and in Vesta. This forced Astermine to use its older secondary launch facility in Ceres and delayed the completion of the project by two years. Public outrage over the incident resulted in violence and property damage against Ceresans and Boranatuans in Vesta, especially in Botulisia.
12. As a result of the two-year delay in the construction of the *Miner*, the orbital motion of both the Earth and *Božněmcová* had taken the asteroid away from its optimal location for capture. As a result, an additional \$32 million was spent in redesigning the propulsion system and fuel to allow the *Miner* to reach its destination. The delay also coincided with the discovery of large and previously unknown palladium deposits in South America, causing world palladium prices to fall around 12% from the prices originally projected at the time of the return of the *Miner*.
13. Vesta demanded compensation from Ceres for the damage caused by BM-52. Negotiations between the two countries, mediated by the Secretary-General of the United Nations, resulted in Ceres paying US\$860 million compensation to the Vestan Government on 14 November 2028. This payment was made by Ceres on an *ex gratia* basis while denying any liability to pay compensation under international law, and was expressed to be in full and final settlement of any claim by Vesta for damage to persons killed or injured by the incident as well as for damage to buildings and property. As part of the negotiated terms of settlement Vesta returned the recovered wreckage and components to Ceresan authorities, which returned them to Astermine.

14. In April 2030, the Vestan popular press noted that 211 workers and emergency services staff, or 77% of the total number who worked on the crash site of BM-52, had developed various forms of cancer. Eventually it was discovered in October 2030 that the payload of BM-52 was the nuclear propulsion engine to be used on the *Božněmcová Miner*.
15. By April 2035, a further 534 people who worked in offices around the area of the crash were diagnosed with cancers which were probably linked to the radioactive fallout from BM-52. The radioactivity from the crash caused property prices in Botulisia to plummet by an average 60% in the four months from October 2030 to February 2031. The cost of cleaning up the radiation poisoning took four months and cost US\$128 million. The devastation to the business sector as a result of the property crash and its inability to access a significant number of office buildings during the clean-up caused the Vestan economy to go into recession with economic growth at an average -1.9% per annum for the next three years instead of the +2.7% per annum originally forecast by the International Monetary Fund or the +3.4% per annum originally forecast by the Vestan Government.
16. Vesta proceeded to claim compensation from Ceres through diplomatic channels for the environmental damage, the fall in property prices, the subsequent economic recession and the creation of a trust fund for victims whose cancer may be linked to the incident. Ceres maintained that the settlement of 14 November 2028 was a full and final settlement of all existing and potential claims and that, in any event, Ceres was not liable to pay compensation for such heads of damages.
17. On 2 May 2036, a rocket-based missile hit and destroyed several buildings in the central business district of Salmonella and killed 1,016 people. Investigations undertaken by Ceresan authorities as well as investigators from the European Union indicated that the public activist group, Vestan Victims of Astermine (“*Astervic*”), was responsible for the attack. There was evidence (available to the Ceresan Government) that Vesta may have been indirectly financing the operations of the group, though it ceased funding the organisation after the attack and condemned it.
18. In response to what was seen by Ceres to be an act of state-sponsored terrorism, Ceres retaliated by attacking several Vestan watchtowers and forts along the border within the following two weeks. On 30 May 2036, the Vestan national communications satellite was destroyed in space by the use of space-based Ceresan laser technology, previously used as part of a Ceresan global navigational satellite system that Ceres claimed was being used by Vesta to plan an armed attack on Ceres. Both countries also began stationing defensive installations and batteries on the Moon along the border between Lunar Ceresia and New Vesta. The United Nations brokered a peace agreement between the two countries and Ceres subsequently removed their defensive installations on the Moon, but the Vestan facilities remained.
19. Despite the setback as a result of the launch failure of BM-52, the *Božněmcová Miner* was completed in 2029 and arrived at Božněmcová in 2032. The mining was in two stages: the first involved the extraction of ores and, after some preliminary processing, were collected in large canisters that were fired back to Earth orbit for collection from the space stations. Once Božněmcová became small enough in mass, the *Božněmcová Miner* fired its engines and moved the asteroid from its orbit and slowly migrated it to Earth orbit for a more extensive exploitation of its resources (an experimental process called “total capture mining”). The *Božněmcová Miner* returned to Earth orbit with the asteroid in March 2035.
20. Most of the unused portions of the asteroid, containing mainly metallic compounds and various rocks, were used to produce concrete for the new Ceresan lunar colony to be

located near Lake Armstrong. However, many fragments remained in orbit and occasionally caused interference to Vestan satellite transmissions, forcing their operations to move their satellites and install additional shielding to future satellites, significantly reducing their lifespan as well as the increased costs of constructing and launching new replacement satellites.

21. By Special Agreement, Vesta and Ceres bring their dispute before the International Court of Justice. Vesta seeks declarations that:
 - (i) Ceres is liable to Vesta for the payment of compensation for radiation damage and consequent economic losses caused by the failure of the BM-52 launch;
 - (ii) The destruction of the Vestan communications system by space-based lasers on 30 May 2036 was unlawful and entitles Vesta to compensation from Ceres for the damage sustained;
 - (iii) Ceres has violated international law by destroying an asteroid; and
 - (iv) All other relief sought by Vesta in its memorials and oral submissions should be granted and that all claims and relief sought by Ceres should be denied.
22. Ceres seeks declarations that:
 - (i) Ceres is not liable to Vesta in relation to the launch failure of BM-52;
 - (ii) If Ceres was liable to Vesta in relation to the launch failure of BM-52, that liability was fully extinguished by the payment of US\$860 million to the government of Vesta and, in any event, the heads of damage claimed by Vesta are not recoverable;
 - (iii) The destruction of the Vestan communications satellite system did not cause Ceres to violate any applicable international legal principles;
 - (iv) The continuing presence of Vestan military facilities and installations in New Vesta is unlawful; and
 - (v) All other relief sought by Ceres in its memorials and oral submissions should be granted and claims and relief sought by Vesta should be denied.
23. The *Božněmcová Miner* was registered in accordance with the 1968 Registration Convention and lists Ceres as the state of registry, except that the instrument of registration lodged did not indicate the launching States of the *Miner*.
24. Serratis has separately and peacefully settled any claims between Vesta and Serratis and between Ceres and Serratis on the basis that Serratis was not a launching State of the *Božněmcová Miner*.
25. Ceres and Vesta are both parties to the 1967 Outer Space Treaty, the 1972 Liability Convention, the 1968 Rescue Agreement and the 1975 Registration Convention. Vesta became a member of the United Nations when it became independent from Ceres in 2014. Ceres was a founding member of the United Nations in 1945. Vesta has signed and ratified the 1979 Moon Agreement but Ceres has never signed it or recognised it as being part of international law.
26. Ceres and Vesta are both members of the International Monetary Fund, the International Bank for Reconstruction and Development (the World Bank), the International Telecommunication Union and the World Trade Organisation.