



**Investigation by The Commissioner for Animal Welfare  
into the functions and workings of the  
Veterinary Regulations Directorate  
with regards to the death of  
three Bottlenose Dolphins (*Tursiops Truncatus*)  
Onda, Mar and Melita  
at Mediterraneo Marine Park, Bahar ic-Caghaq  
in August/September 2021.**

**Report Date : 1<sup>st</sup> September, 2022**



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## Executive Summary

In February 2022, The Office of The Commissioner for Animal Welfare (CAW) was alerted to the disappearance of three dolphins at Mediterraneo Marine Park -a licensed Zoo in Baħar ic-Cagħaq.

As the regulatory body responsible for the licensing of zoos in Malta, CAW requested clarifications and information regarding the whereabouts of these three dolphins from The Veterinary Regulations Directorate (VRD).

Following two months of lethargic responses from the VRD, CAW was informed that the three dolphins had in fact died back in Aug/Sep 2021, all three within the span of 20 days.

CAW was later informed that the VRD had conducted its own investigation and concluded that what occurred was a pure accident, therefore the operating license of the zoo was not affected, and no enforcement action was taken by the VRD.

Initially the VRD did not divulge the cause of death to CAW, but CAW discovered through third party sources, that the most likely cause of death was lead poisoning.

Given that lead poisoning is not a naturally occurring disease, on the 9<sup>th</sup> July, 2022, CAW opened an official investigation as per CAP 439 Art 44(1f) to "investigate....the functions and workings of Veterinary Services."

CAW's investigation has concluded that the VRD conducted a cursory and fleeting investigation and only after being pushed by CAW's inquiries that started in February 2022. Before this date, no event-specific measures were taken by the VRD, and MMP was allowed to go about its business as usual.

CAW is of the opinion that the three dolphin deaths, Onda, Mar and Melita, merited far more scrutiny, attention, and certainly a more immediate response, by the VRD.

Finally, whilst CAW appreciates that this was not a case of MMP causing voluntary harm to animals or even one of blatant neglect, a degree of negligence was involved on more than one occasion and therefore disagrees with the VRD's assessment of it being a 'pure accident'.



## Sources of information

- XXXXXX - Director – Veterinary Regulations Directorate (VRD)
- XXXXXX – Principal Veterinary Officer - Veterinary Regulations Directorate
- XXXXXX – Junior Veterinary Officer – Veterinary Regulations Directorate
- Environment & Resources Authority (ERA)
- XXXXXX - Marine Connection UK
- XXXXXX – Current Supervising Manager - Mediterraneo Marine Park (MMP)
- XXXXXX – Current Veterinary Surgeon - Mediterraneo Marine Park
- Various news stories in local papers
- Cetabase records



## Background and Chronology of Events

On 16<sup>th</sup> February 2022, The Office of The Commissioner for Animal Welfare (CAW) was alerted by a member of the public, about the disappearance of three (3) dolphins from Mediterraneo Marine Park (MMP).

This was confirmed by the UK based NGO Marine Connection.

CAW immediately sent a request to the Veterinary Regulations Directorate (VRD), the regulatory body for zoos in Malta, for more information about the whereabouts of said dolphins.

At this point CAW was simply inquiring and had no basis for opening of an investigation utilising CAP439 44A(1F).

On the 24<sup>th</sup> February 2022 – VRD (Dir. XXXXXX) responded to CAW with no explanation as to the whereabouts of the missing dolphins, but explained that the park was last visited and licensed in December 2021, and that another visit was scheduled for the last week of February, 2022.

On the 26<sup>th</sup> April, 2022 (a month later) – the VRD informed CAW that Dr XXXXXX from the VRD, inspected MMP on 1<sup>st</sup> March 2022, and that no animal welfare issues were noted.

In this communication to CAW, the VRD revealed that three dolphins had died at the park back in 2021 but at this point no cause of death was offered.

In order to establish cause of death, CAW immediately requested the three dolphins' necropsy (post-mortem) reports from the VRD.

By May 8<sup>th</sup>, 2022, VRD had not provided the requested necropsy reports, but CAW acquired them through another source.

The necropsy reports revealed that the dolphins had died within the span of 20 days, between 25<sup>th</sup> August 2021 and 14<sup>th</sup> September 2021.

The 'presumptive cause of death' on the necropsies read: 'Hypovolemic shock/multi-organic failure due to hypoxia, and the details of these reports and other veterinary investigations, clearly indicated that lead poisoning was the most likely cause of death in all three dolphins.

Given that lead poisoning is not a naturally occurring disease, CAW immediately reverted to the VRD requesting more insight and information on what led to this tragic incident.

On the 10<sup>th</sup> June, 2022, (9 months after the deaths of the dolphins), VRD informed CAW that an investigation (by VRD) into the deaths of the dolphins was still underway and that once concluded CAW will be immediately informed of the outcome of the investigation.

On 27<sup>th</sup> June, 2022 VRD informed CAW that the tragic deaths of the dolphins "had been investigated by VRD and concluded that there was no infringement to the Animal



Welfare Act. The VRD concluded that what occurred was a pure accident and did not involve negligence and even more there was no evidence of a deliberate cruel action to injure or kill these animals. Therefore, the operators of this zoo will carry on as usual and their operating license will not be affected besides, they will not be issued any enforcement action by the VRD."

At this point, despite various follow-up questions from CAW, the VRD still refused to elaborate or explain what type of accident caused the lead poisoning and subsequent death of these dolphins. The VRD claimed that due to data protection, it could not divulge more information.

CAW therefore invoked CAP 439 Art 44 (1F) which authorises CAW to review and investigate the functions and workings of The Directorate of Veterinary Services, or the Directorate responsible for Animal Welfare.

On 9<sup>th</sup> July 2022, the VRD and The Ministry for Agriculture, was informed that an official investigation as per CAP 439 Art 44 (1F) was being launched by CAW and that detailed information about the deaths of the three dolphins was to reach CAW by 14<sup>th</sup> July, 2022.

Despite the 14<sup>th</sup> July, 2022 deadline, the VRD only sent the requested information on 21<sup>st</sup> July, 2022.

On the 25<sup>th</sup> July, 2022, CAW requested further information from the VRD which was replied to three weeks later, on the 19<sup>th</sup> August, 2022.

On the 18<sup>th</sup> August, 2022, CAW interviewed current Supervising Manager and Veterinary Surgeon currently employed at The Mediterraneo Marine Park (MMP).



## Summary of Findings as reported by Mediterraneo Marine Park

This version of events on behalf of Mediterraneo Marine Park was provided by the new and current managing supervisor and veterinary surgeon. Both were not employed with MMP at the time of the incident. The managing supervisor and veterinary surgeon who were employed at the time, are no longer with the company.

In the beginning of August 2021, during routine medical training, MMP employees noticed that several lead pellets (2-3mm diameter) were stuck between some of the dolphins' teeth, namely, the now deceased female dolphins, Onda, Melita and Mar.



Lead pellets of this type are used by some scuba divers as weights. (see pic for example)

Following the discovery of the lead pellets between the dolphins' teeth, veterinary investigations confirmed a diagnosis of lead toxicosis and, on the 10<sup>th</sup> August, 2021, MMP started treating the dolphins for this condition.

Due to lack of bibliography and experience about this kind of poisoning, MMP involved a few European colleagues to collaborate with the treatment. However, despite various attempts to treat and save the dolphins, three females died within days of each other. Onda died on the 25<sup>th</sup> August, 2021, Mar died on the 7<sup>th</sup> September, 2021 and Melita died on the 14<sup>th</sup> September, 2021.

Ulisse, a young male dolphin, is to date still in recovery, as he has now developed chronic lead poisoning. There are now remain a total of five male dolphins at MMP.

Within days of each death, MMP's veterinary surgeon performed necropsies (post mortems) for each dolphin and informed the VRD of their demise.

Mediterraneo Marine Park claims to have never allowed its employed divers to use these types of weights and only solid weights are allowed. MMP assumed therefore, that an 'external' diver (not an employee of the park) must have introduced the pellets into the tanks.

MMP concluded that the sub-contracted diver's lead pellets pouch must have been misplaced, eventually releasing a large number of lead pellets into the tank. The majority of the pellets got stuck in the filtration system but were inadvertently released back into the tank when a strictly prohibited back-wash procedure was performed by an MMP employee, on 27<sup>th</sup> July, 2022.

According to MMP it is impossible to identify when the pellets were first released into the pool and by which diver. Some of the pellets had undergone major decomposition and disintegration indicating that they could have been there for a long time.

Between August 2021 (when the first dolphin died) and February 2022, VRD visited the park once – on 19<sup>th</sup> October 2021. This was a routine and scheduled visit for re-licensing purposes. The incident of the dead dolphins was discussed verbally during the meeting.



In February 2022 (five months after the incident), the newly employed Supervising Manager at MMP, XXXXXX, took the initiative to investigate the matter further to make sure that similar incidents are avoided in the future.

During MMP's internal investigation, a double-aspiration process (pump and filtration pull is doubled) was performed, and another 1kg of lead pellets were found inside the pre-filter.

The discovery of another 1Kg of lead pellets continued to strengthen MMP's theory that a diver who was engaged before July 2021, must have used a standard 2kg bag of lead pellets as part of his/her diving gear, and then misplaced it.

Mr XXXXXX assumes (but cannot be sure) that it was a sub-contracted diver who used lead pellets, because all employed divers are made very much aware that the use of such lead pellets are strictly forbidden in the dolphin tanks. Only solid weights are allowed.

When asked whether the pellets could have been sucked up directly from the sea, which was the initial explanation offered by the VRD, MMP claimed that this was practically impossible because of the vertical structure of the pump, the filtration system and the mechanics of the compensation tank that is installed in the bore hole.



## Summary of Findings as reported by The Veterinary Regulations Department

As per conditions of S.L 439.08 – Keeping of Wild Animals in Zoos Regulation, the VRD was notified of the dolphin deaths at MMP within days of their occurrence – 2<sup>nd</sup> September 2021 (Onda), 9<sup>th</sup> September, 2021 (Mar), 16<sup>th</sup> September, 2021 (Melita).

The VRD first visited MMP more than a month after the third dolphin's death - on the 19<sup>th</sup> October, 2021. It was confirmed by the VRD and MMP that this was a pre-planned and routine inspection for re-licensing purposes.

During this inspection, the dolphin deaths were discussed, necropsy reports and histology results were disclosed, but the official reports, which are all dated August/September 2021, were not sent to the VRD before April and May 2022 (7 months later).

According to replies sent on the 21<sup>st</sup> July 2022, from VRD to CAW, the dolphins had most probably died due to lead poisoning as a result of scuba diving lead pellets entering the dolphins' tank "presumably from diving equipment gear, abandoned in the sea near the aspiration valves outside the park."

This was contradicted by MMP who concluded that the pellets were introduced into the tank by a sub-contracted diver who was hired to clean the tanks during the COVID-19 crisis.

According to VRD the backwash procedure, which was performed by MMP in July 21, was what caused the pellets to enter the tank. This was corroborated by MMP and VRD confirmed that this procedure is 'strictly forbidden'.

By the end of its investigation the VRD claimed to be in full agreement with the actions taken by MMP and no further corrective actions were deemed necessary:

- The employee who performed the forbidden back-wash procedure no longer worked at the company.
- MMP had a long-standing ban on the use of lead pellet pouches by divers.
- The dolphins were trained to be monitored (via blood samples etc).
- The effected dolphins were under treatment.



## Commissioner's Observations and Conclusions

1. As is legally required, MMP informed the VRD about the demise of each dolphin within days of their deaths.

Despite the out of the ordinary nature of this incident, there is no email record of a reply or reaction to these deaths from the VRD.

In addition, the VRD only visited MMP a month after the third death was communicated to them. The visit was a pre-planned scheduled routine inspection for re-licensing purposes and not specifically to investigate the unusual and unexpected deaths of these three dolphins.

This delayed and broad based action by the VRD does not match the seriousness of the incident, nor does it match the sentiment of an email dated 10th June, 2022, in which Principal Veterinary Officer -VRD Dr. XXXXXX wrote the following "...all the officers at the VRD found this incident to be a tragic one and left us all in disbelief..."

The very bare minimum that CAW would have expected in reaction to such an extraordinary and tragic event, is for the VRD to pay MMP a visit, conduct an inspection and open an investigation within days of the third dolphin's death. Not only was this not done, but nine months after the dolphin deaths, the VRD claimed not to have yet concluded its investigation.

2. In its reply to CAW dated 21<sup>st</sup> July, 2022, the VRD claimed that MMP management was still awaiting laboratory results from a foreign pathology expert. However, all the veterinary documents provided to CAW, both by the VRD and by MMP are dated August/September 2021.

If later-dated veterinary documentation exists it was not presented to CAW for this investigation. This unnecessary postponement is indicative of extremely slow practices within the VRD and/or a general lack of transparency.

3. The necropsy (post-mortem) reports were drawn up by a vet who at the time was employed at MMP. The procedures were not supervised or monitored, by the VRD. Whilst this is clearly normal practice, in the case of multiple deaths that happen in such close succession, CAW would expect the VRD to get involved in the necropsy and other veterinary processes to ensure good governance and to avoid potential internal interference.
4. In the case of the third dolphin – Melita - that died on the 14<sup>th</sup> September 2021, the necropsy report is dated before the date of death - 7<sup>th</sup> September 2021. This is, at best, a typing error but one which should have been highlighted and spotted by the VRD.
5. As part of its investigation the VRD asked MMP for an official declaration in the form of a brief written description of the incident and circumstances that led to the demise of the three specimens. The VRD made the request on the 24<sup>th</sup>, May, 2022, 9 months after the incident. The declaration was delivered by MMP on the next day - 25<sup>th</sup> May, 2022.



This delay in requesting a formal declaration from MMP, continues to corroborate CAW's impression, that the VRD did not apply the required sense of urgency, seriousness, and outrage that such a tragic incident deserved. In fact, it seems that until CAW started to ask questions and apply pressure on the matter around February / March 2022, no event-specific measures were taken by the VRD, and MMP was allowed to go about its business as usual.

6. According to replies sent from the VRD to CAW on the 21<sup>st</sup> July, 2022, "the lead pellets originated presumably from diving equipment gear, abandoned in the sea near the aspiration valves outside the park."

In a news story that was published only two weeks later (11<sup>th</sup> August, 2022) MMP claimed that the lead pellets originated from an external (sub-contracted) diver who was hired to clean the tanks during the COVID crisis.

When CAW specifically asked MMP if there was the slightest possibility that the lead pellets originated from diving equipment gear, abandoned in the sea, as the VRD had initially presumed and presented as an explanation to CAW, MMP immediately and categorically replied in the negative. Mr. XXXXXX claimed that this was a physical impossibility because of the nature and structure of the pump and filtration system. CAW is therefore particularly concerned on how the VRD had initially reached a different explanation to the one readily and easily offered by MMP, when MMP's own explanation about the source of the lead pellets, is by far more blameworthy.

7. Whilst the VRD concluded that this was a "pure accident", MMP readily admit to two operational oversights. Whilst both actions did not purposefully intend to harm the animals, both carried a certain level of negligence or mismanagement on the part of MMP:
  - 1: Sometime before 27<sup>th</sup> July, 2021 a sub-contracted diver was allowed into the dolphins' tanks with gear (lead pellets) that had been banned by MMP since the park opened in 1997. Clearly this means that the diver was not checked before entering the tank. The fact that the diver was not employed but sub-contracted does not reduce MMP's responsibility over the matter. Whilst the COVID-19 crisis might have played a role in this tragic matter, MMP should still be held somewhat responsible for such an oversight.
  - 2: An operative of the park disobeyed protocol and performed a backwash procedure, despite being forbidden and denied permission by corporate management. The employee has since been laid off, however since this is such a dangerous procedure it should not be physically possible for one operative to perform it without permission.
8. It took until February 2022, for the new Supervising Manager to take concrete action (on his own initiative) to make sure that all the lead pellets had been removed. When the filtration system was examined in February 2022, another kilogram of lead pellets was found stuck in the debris. Some of the pellets were very badly corroded increasing the risk of another toxicity incident.
9. On the 27<sup>th</sup> June, 2022, the VRD wrote to CAW saying that the (VRD) investigation into the tragic deaths of the dolphins had been concluded and that there was no



infringement to the Animal Welfare Act. However, on the 26<sup>th</sup> July, 2022 (a month later) the VRD conducted an on-site inspection and formally asked for 7 documents relating to the incident. Even if the contents of these documents had been discussed in previous communication between the VRD and MMP, CAW is of the opinion that these were imperative to such an investigation and should therefore have been officially requested and thoroughly examined prior to concluding it. The documents were the following:

- Filtration system plan and technical sheet
- Safety diving protocols, SOP, diving logbooks and used equipment
- Copy of training for such protocols for each diver
- List of internal and external divers in 2021 to date
- Procedures (verbally explained) that are currently in place to eliminate any residual lead pellets and to avoid the replication of such event.
- Since when Costa Park has been the responsible of the park?
- To your knowledge, was the use of lead pellet bags always prohibited at Mediterraneo Park during Costa Park management? Was/is there any list of forbidden items?

10. On 22<sup>nd</sup> August, 2022, CAW asked the VRD how MMP meets the Zoo Licensing requirements particularly SL439.9 (3a) and (3b). To date no information addressing this question has been received by CAW.

SL439.9 (3a) and (3b):

"The Veterinary Services shall take measures under regulations 4, 5 and 6 to ensure all zoos implement the following conservation measures, that is to say:

(a) participating in research from which conservation benefits accrue to the species, and, or training in relevant conservation skills, and, or the exchange of information relating to species conservation and, or, where appropriate, captive breeding, repopulation or reintroduction of species into the wild,

(b) promoting public education and awareness in relation to the conservation of biodiversity, particularly by providing information about the species exhibited and their natural habitats."

11. Whilst CAW appreciates that this was not a case of MMP causing voluntary harm to animals or even one of blatant neglect, a degree of negligence was involved and therefore disagrees with the VRD's assessment of it being a 'pure accident'.

12. Finally, it is CAW's opinion that the VRD conducted a cursory and fleeting investigation only after being pushed by CAW's inquirers that started in February 2022. The matter merited by far more scrutiny, attention, a more immediate response, and much more in-depth examination by the VRD.



## Commissioner's Recommendations

1. Whoever enters the dolphin tanks, whether an employee, a client, or a subcontractor should be made aware of all the rules, particularly of any prohibited actions. They should also be thoroughly checked for prohibited materials.
2. All equipment including diving gear entering the tanks should be logged before entering the tanks and after exiting the tanks. This procedure should be applied whether the tanks are full or empty, and whether the dolphins are in them or not.
3. Performing a backwash (reverse-wash) procedure that allows debris to enter the water tanks should not be technically possible without the agreement and physical presence of corporate maintenance. Mechanical or digital security measures should be implemented to ensure this. Signs should also be put up to this effect and clear consequences published.

If for whatever reasons a reverse-wash is performed anyway, a thorough cleaning of the tanks including a scraping and syphoning routine should be done. This should be followed by a double aspiration procedure to ensure that no debris is caught in the pre-filter.

4. In the case of unusual deaths in any zoo, necropsies should not be conducted by the zoo's own employed or privately engaged veterinary surgeon, but by an independent vet as indicated and chosen by the VRD, in the presence of the zoo's engaged veterinary surgeon.
5. In the case of successive multiple deaths at a zoo, whether foul play is suspected or not, the VRD should get involved immediately, and an on-site inspection should be held not later than 48 hours after an incident.
6. Responses to CAW in queries and investigations regarding the welfare of animals should be replied to within a maximum of 72 hours. (It took 86 days and countless emails, for the VRD to inform CAW that the dolphins had died due to lead poisoning).
7. Following this tragic incident, CAW highly recommends a complete and thorough review of S.L 439.09, as well as the conditions, protocols, and processes of all zoos in Malta. Part of this review should legally oblige zoos to update public databases like Cetabase. To date the public database Cetabase.org (a non-profit organisation dedicated to compiling the most extensive global record of whales, dolphins, porpoises and other marine mammals under human care) is still not updated and Onda, Mar and Melita are still registered as living at Mediterraneo Marine Park.

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