This document is a translation made by SHK of the original response in Swedish to the safety recommendation. In case of discrepancies between this translation and the Swedish original text, the Swedish text shall prevail in the interpretation of the response.

To: Swedish Accident Investigation Authority

info@shk.se

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Response to statement concerning the Swedish Accident Investigation Authority's report SHK 2025:05

#### 1. Introduction

On 20 March 2025, the Swedish Accident Investigation Authority (SHK) published its report "Fire at Liseberg Oceana Waterworld in Gothenburg" (SHK 2025:05). In its report SHK described its investigation of the sequence of events and the causes of the fire. As a result of this, SHK also issued safety recommendations to NCC, WhiteWater, Liseberg and the Swedish Work Environment Authority. The safety recommendation directed at Liseberg was worded as follows:

"Liseberg is recommended to, as a developer, continue to develop its systematic work environment management with the aim of enhancing the safety culture. This work should encompass, among other things, clearer imposition of requirements on contractors and continual follow-up of their systematic work environment management."

Through the report, SHK ordered the addressees to inform SHK no later than 23 June 2025 of what measures had been implemented as a consequence of the safety recommendations issued. To comply with this order Liseberg is submitting here an account of all relevant measures implemented with the aim of enhancing and developing Liseberg's systematic work environment management as a developer in the periods both prior to and after receipt of the safety recommendation.<sup>1</sup>

# 2. Description of measures implemented

#### 2.1. Introduction

In its role as developer, Liseberg is responsible for ensuring that work environment aspects are taken into account at every stage of the planning and design of a construction project when it comes to both the construction phase and future use of the structure. Furthermore, it is incumbent on Liseberg to appoint a construction work environment coordinator for planning and design (BAS-P) and

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<sup>&</sup>lt;sup>1</sup> As described in the letter "Justerade arbetssätt Liseberg 241216" [Adjusted working methods Liseberg 16/12/24] previously sent to SHK, Liseberg had, as early as in the middle of December 2024, conducted in internal analysis of its working method in its role as developer and has implemented improvement measures within several areas of significance to systematic work environment management. The improvement measures are include in the account provided in this letter.

a construction work environment coordinator for execution (BAS-U) to undertake the duties that accompany these roles. Liseberg also generally has "backup responsibility" in relation to the BAS-P and BAS-U. In these respects the role of developer entails a responsibility to set requirements and follow up the coordination work between parties involved in a construction project.

Liseberg has implemented a thorough review of its systematic work environment management in its role as developer with respect to all the areas of responsibility specified above. The improvement measures that have been identified and introduced pertain to the entire scope of the construction project and therefore encompass all stages – from setting requirements in a procurement process to design and execution. The main focus of the measures is on improving and clarifying existing work environment functions within the organisation.

The following contains Liseberg's account of these measures.

#### 2.2. Measures implemented

### 2.2.1. Policy documents

Liseberg's *Anvisningar Byggprojekt* [Instructions Construction Projects]<sup>2</sup> and *Handbok för byggprojekt* [Handbook for Construction Projects] have been updated on a range of points in order to clarify the responsibilities of the developer within the scope of all construction projects being undertaken by Liseberg. The most substantial changes are listed below and entail Liseberg having:

- clarified its role as developer in order to ensure that the requirements imposed by virtue of the Work Environment Act and underlying regulations are fulfilled;
- clarified which roles within Liseberg's organisation are responsible for work environment management;
- described Liseberg's monitoring systems and procedures for fulfilling the requirements as a developer;

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<sup>&</sup>lt;sup>2</sup> Liseberg shares a revised version of the document "Anvisning Byggprojekt" with SHK via email on 19 December 2024.

- produced a checklist for follow-up of systematic work environment management that has to be used in construction projects;
- determined that matters concerning the work environment within the scope of construction projects are always part of what is being reported to Steering Group Project;
- clarified that consideration must always be given to the size and complexity of the project, even at an early stage and in the procurement process, and that consideration shall be given to whether the time aspect impacts the work environment; and
- determined that major construction projects shall be followed up through workplace inspections performed by external inspection companies.

Liseberg has decided that the work environment in construction projects shall be managed in the same way throughout the entirety of its organisation. Furthermore, Liseberg has produced an incident management plan that parties involved (i.e. Liseberg, contractors and external inspection companies) have to take into account ahead of workplace inspections during construction projects. This shall provide tangible guidance in order to ensure that incidents that are possible to identify during a workplace inspection are dealt with a correct, consistent and predictable manner. This enables the incident management plan to contribute to a secure and safe construction site (and also to meeting other vital public interests such as countering labour crime and unsound competition).

### 2.2.2. Setting requirements in procurement processes

Liseberg has put in place measures to further enhance the safety culture in relation to contractors. Liseberg's template for the contract document *Administrativa Föreskrifter* [Administrative Regulations] has been updated on several points in order make the requirements more stringent. Examples of this are that tenderers/contractors must have a management system for systematic work environment management and that the requirements placed on BAS-U are tailored to the size, complexity and risk level of the construction project.

Liseberg has also clarified how the requirements that are placed on contractors are to be applied all the way down through the chain of subcontractors. For the purpose of improving the opportunities to follow up procured contracts at the individual level, a requirement is being introduced under which assigned contractors must, immediately after the contract is signed, sign a controller-processor contract.

#### 2.2.3. Follow-up

When Liseberg's Steering Group initiates and orders a construction project, the order must include an assessment of the nature of the project from the perspective of the work environment. This original assessment shall be conveyed to appointed work environment coordinators for future work for both the BAS-P and BAS-U. A dedicated meeting shall also be implemented for the hand-over of a Work Environment Plan from BAS-P to BAS-U.

While the project is ongoing the appointed project manager is responsible for ensuring that the project adheres to Liseberg's control system in accordance with the project instructions in *Anvisningar Byggprojekt*. A review of the contractor's systematic work environment management shall take place at the start-up meeting in respect of a new project. Furthermore, work environment issues will be a constant point for review at each Construction Meeting during the execution of a construction project.

Continual separate inspections of the systematic work environment management shall also be implemented in accordance with the document *Checklista Arbetsmiljö Byggherre* [Checklist Work Environment Developer]. Workplace inspections of major construction projects shall be performed by an external party.

The head of the project is responsible for reporting on the project to Steering Group Project, to which an account of the work environment management is regularly provided. They are also responsible for revising the inspection system for work environment management once per year, whereby experience from construction projects has to be taken into account for any revisions to procedures.

Finally, members of staff who order contracted works shall participate annually in continuing professional development in areas related to work environment.

# 2.3. Specific information about the reconstruction of Oceana

The reconstruction of Oceana continues at full pace and Liseberg estimates that it will be possible to complete the works around the end of 2026 or beginning of 2027.

Liseberg has engaged an external consultancy for the purpose of creating, together with NCC, accord with BAS-P and BAS-U, respectively, regarding the work environment responsibilities incumbent on Liseberg (Developer) and NCC (General Contractor), respectively, during the reconstruction project.

Several parts of the work that has been mentioned have already been implemented during the work on the construction of Oceana prior to the fire on 12 February 2024.

As described in the following section, additional inspections have been introduced and measures reinforced.

Continual follow-up of the work of BAS-P and BAS-U, respectively, takes place with debriefings in accordance with an "year wheel" that describes the overall work environment management. The year wheel also describes which quarterly inspections the consultant engaged by Liseberg shall conduct in order to support the systematic work environment management.

With the assistance of an external company Liseberg has conducted a workplace inspection as well as an enhanced work environment inspection with respect to the reconstruction. The inspections were conducted on 26 March 2025 and resulted in a report the results of which have been processed jointly by the parties involved in the project.

The results of the review indicated a well-organised construction site from the perspective of the work environment. For example, 100% of the people working on the project were logged in to the workplace, all were using the correct protective equipment and had undergone *Safe Construction Training*. A few recommendations were issued, all of which have already been processed. Liseberg will have an external company conduct new inspections in June 2025. In addition to this, Liseberg intends to conduct a further 2–4 similar inspections before the final survey.

During the construction phase Liseberg's project managers have to continually work on the basis of Liseberg's *Anvisningar Byggprojekt* and *Handbok för byggprojekt* and actively adhere to the procedures that are in place. The document *Checklista Arbetsmiljö Byggherre* shall be implemented within the scope of this. The checklist will be used at least twice per year in order to monitor compliance. Depending on the outcome of these inspections, the number of inspections may be increased. The inspections will be documented in writing. An initial follow-up of compliance with procedures has already taken place.

In its role as developer, Liseberg participates actively with at least one representative in all safety inspections that take place on the construction site. Safety inspections and targeted safety inspections take place around three times per month.

Liseberg is also present during all construction meetings that take place on the construction site and will normally be represented by at least three participants who protect the interests of the developer. The construction meetings also include follow-up of the systematic work environment management on the construction side. In addition, Liseberg participates in production meetings, scheduling meetings and meetings for visual planning that take place on the construction site together with NCC and ancillary contractors and subcontractors.

Finally, Liseberg has also been involved in the work to produce the new procedures and enhancements that NCC has undertaken on the construction site with regard to the work environment.

# 3. Concluding summary and comments

A good safety culture during a construction project is contingent on all participants understanding the importance of safety and taking collective responsibility. In this respect and in its role as developer, Liseberg has an important responsibility to set requirements and conduct follow-up to ensure that there is functional coordination between the parties involved.

Liseberg is an organisation that was already characterised by a strong safety culture. In line with this, procedures and policy documents are updated continually for the purpose of enhancing the systematic work environment management. The measures that have been implemented ahead of and after receipt of SHK's safety recommendation will enhance all stages of Liseberg's systematic work environment management – from procurement and the setting of requirements to design and execution.

Finally, Liseberg would like to thank SHK warmly for its work on the investigation and the report. Liseberg is convinced that this will contribute to a greater awareness in the construction industry of the risks associated with electrofusion and to preventing a similar fire from occurring in future.

Gothenburg, 19/06/2025	
Thomas Sjöstrand	