COMMENTS TO DRAFT REPORT 'OIL SPILL PORT OF ROTTERDAM'.

Party	Paragraph	Text to be corrected (first ... last word)	Comments	Response Dutch Safety Board
Odfjell	1.1.1	collided with the jetty	An object at the jetty	The images also show that the vessel collided with the jetty.
Port Authority	1.2	"In such cases <…> crisis management" should be: "In such cases, the water quality manager and the organizations responsible for crisis management take responsibility". Add: "The Port of Rotterdam Authority opted to maintain a clean-up organization and screen pool on standby."	In addition to the polluter pays principle, the provisions also apply as laid down in the General Conditions for Seaport Fees, Inland Port Fees and Waste Substances Contribution for Seagoing Vessels. These conditions specify that the (legal) person that makes use of the Port is required to immediately clean up any contamination caused by them, in consultation with the Harbour Master. Havenbedrijf Rotterdam NV is entitled to clean up the contamination and pollution for the account of the polluter, if the polluter itself does not take action in good time.	Later in the report an elaboration is given of how the clean-up organization is structured.
Odfjell	1.5.1	vessels owner	Vessels owner NCC	This sentence merely clarifies that an owner is formally required to appoint a ship manager.
Odfjell	1.5.7	HEBO has entered into an agreement	Hebo has exclusive right to operate in port of R and no other companies will be allowed in as in the later phase of the clean-up operation	This sentence merely clarifies that an owner is formally required to appoint a ship manager.
Odfjell	2.1.1	without cargo	With clean cargo tanks	We know that there was no cargo on board but are unable to determine whether in legal terms the cargo tanks were in fact clean.
VRR	2.1	"In … 47 minutes." According to the VRR is at least 6 minutes shorter.	On page 7 - line 8, the Dutch Safety Board states that the oil spill started at 13:27 and in this line that it lasted 47 minutes. In other words, according to the Dutch Safety Board, the escape of oil lasted until 14:14. The Duty Fire Officer arrived between 14:05 and 14:07 and the Hazardous Substances Advisor (AGS) arrived at the scene of the incident at 14:08 hours. Both did not observe oil escaping at that moment.	Source LCMS journal of the CoPI: 14.13.
Port Authority	2.4.1	", but that this only applied to a limited extent to the mooring post" replaced by "but due to the shape of the ship and the angle of the collision, this only applied to a limited extent to the mooring post."	Mooring post 2 was unable to bend because it was not subjected to load in accordance with the design principles due to the shape of the vessel (raked) and the collision angle. The vessel hung vertically on it and crept up, rather than colliding horizontally with the front of the post. In addition, the concrete edge is an integral part of the jetty and is fixed to the jetty and as such cannot move towards the jetty. The concrete edge was scraped by the raked shape of the vessel and the forward and still rotating motion of the vessel.	The investigation demonstrated that the vessel did initially come into contact with the front of the post horizontally. This is also how it is described in the report.

Party	Paragraph	Text to be corrected (first ... last word)	Comments	Response Dutch Safety Board
Odfjell	2.3.1	This section is detailed, and describes how a BRM shall work. In our opinion, the fact that the Master did perform a detailed and thorough Master Pilot Exchange, and a completed pilot card was handed over and discussed properly with the pilot, should be mentioned in the report. In our opinion this shows that all officers on bridge at the time of the incident were well aware of the intention, and how the manoeuvring alongside the jetty should be done. It must also be mentioned that although this section is thorough, is does not mention the pilot as part of the BRM team which he without doubt is. In our opinion, the pilot plays an important role as part of the BRM team as the Masters advisor, this due to the fact that the pilot is the one person on board which have in depth knowledge of current, tide and the nature of the jetty the vessel are to berth at. In addition, we are of the opinion that the use of the Dutch language between pilot, tug and the VTS, must be mentioned, because we believe that by using English as the working language between all involved parties, would have increased the situational awareness among the BRM team on board Bow Jubail. In our opinion the most valuable learning point after this unfortunate incident are the lack of situational awareness among the BRM team and in particular among the pilot and the Master. If they had had the situational awareness, the pilot would have questioned or even stopped the Masters order to put full to port wheel and give a "kick ahead to stop the bow".	This input was contained in the letter from Odfjell with the table and has been included in this table because the report was not adjusted on this point.	The Pilot master exchange and form say nothing about the way in which the other members of the bridge team were informed about the manoeuvre, in advance. The fact that the pilot communicated with the tugboat and VTS in Dutch bears no relationship to the accident.
Odfjell	2.5.2		The structures on the quay front also contributed to the puncturing of the vessel hull.	This is stated in section 2.4.1.
HEBO	3.1	The first oil recovery vessel from Hebo… up to work.	The first oil recovery vessel from Hebo started recovery work 2.5 hours after the collision, subject to the instructions of the DHMR; this is 2 hours and 10 minutes after the report was received by Hebo. The first incident coordinator was in place at 14:30; this was 45 minutes after the report was received by Hebo.	These are conclusions.
Harbour Master	4.1.	"In the first hours ... no direct contact ... crew" replaced by "Contact with the vessel and the crew during the first hours took place via the RPA12, DO-HCC, Pilotage Service Commander (LDL) and the pilot on board."	There clearly was contact with the vessel and crew, and - not unusually - this took place via the pilot on board.	The text of the report indicates that there was no direct contact. The proposed suggestion confirms this, merely clarifying how the contact was made.
VRR	4.1	At the end of the line add: *The relationship between the demand for care following the incident and the possible exposure during the incident cannot be determined after the event.*	The reports of the interviews do not make it clear whether there is a causal link between the medical assistance, the complaints and the possible exposure.	The Dutch Safety Board made this observation on the basis of all investigation information, and not only on the basis of interviews with the VRR.
VRR	4.1	"The advice ... to go" Proposal to replace by: *Medical assistance was neither provided nor offered to anyone on or around the Bow Jubail. The measurements and/or recommendations from the Hazardous Substances Advisor and the Health Advisor on hazardous substances gave no grounds for providing medical assistance by the duly competent emergency services personnel on site. Boatmen, the pilot, tugboat crew and the crew of the vessel were advised by the Duty Officer of DHMR to consult their GP if they experienced any health problems.*	The advice relating to the safety of those directly involved at the incident location was applicable to the emergency services staff, the crew of the Bow Jubail, the pilot, the crew of the tugboats and the boatmen (see LCMS). Medical assistance is offered if there are any victims, but there were no signals that this was the case. GAGS and AGS offer only advice, and themselves do not provide medical assistance. This is the primary task of the ambulance personnel and/or other medical personnel.	The information provided here is factually correct. The investigation revealed that there were in fact health problems among a number of those involved.

Party	Paragraph	Text to be corrected (first ... last word)	Comments	Response Dutch Safety Board
Harbour Master	4.2	Please remove from the text: and the actual outcome deviated considerably from what the participants in the CoPI meeting considered likely.	The text to be deleted is partially incorrect. Experience with flow patterns in the affected area and training in the behaviour of oil on and in the (surface) water meant that the 1st Duty Officer - DHMR announced GRIP-2 in consultation (large effect area) specifically because he did not expect that the pollution would be restricted to a limited area.	The report is factually correct. Because the wrong starting parameters were used, and an outcome emerged which on the basis of the experience of the other participants in the CoPI was not considered likely. The starting parameter was that the 3rd PET was fully closed off so that the oil could not have spread that far. Interview: "prediction from the WMC was that the oil would remain in the front part of the port and in the 3PET".
VRR	4.3	For image forming in the framework of the fire brigade drones.	The drones available to the fire brigade and the deployment procedures employed are not suitable for producing overview pictures in a large and extensive area, such as the spread area for this incident whereby the oil spread over kilometres of waterway.	This is discussed elsewhere in the report.
VRR	4.3	"There was no ... by CoPi/ROT." Proposal to replace this line by: *Contact from the liaison with the RCT took place according to the GRIP regulations via Rijkswaterstaat in the ROT. The digital information and photographic and film material were made available to the relevant services, and distributed netcentrically via the National Crisis Management System (LCMS). At the moment of the incident, Rijkswaterstaat had no access to LCMS, because the connection conditions had not yet been satisfied.*	In accordance with the GRIP regulations, the liaison between an organization or company in the ROT is the linking pin to the relevant organization, and contributes specific knowledge which is available to organization components of the organization which he/she represents. The liaison officer then on the one hand ensures that information from the ROT reaches the relevant officers within his own organization, and on the other hand contributes questions and bottlenecks and specific knowledge and expertise from the organization to the ROT.	No factual inaccuracy, but an addition which according to the Dutch Safety Board is either not necessary or has no influence on the conclusions.
VRR	4.3	'... as a consequence of the oil." Proposal to add to this sentence: *…. as a consequence of the oil. This information was directly shared on that same evening, by telephone, by the Regional Operational Leader of the VRR, with the Regional Operational Leader of the Haaglanden Security Region.*	See reporting in LCMS.	Not essential information and has no influence on conclusions and recommendations.
VRR	4.3	"However, this information ... at the Rotterdam Harbour Master's Division." Request to erase this sentence.	There was no direct, formal line of communication from the ROT to ODs in the field. The concerns about the fuel oil below the water surface were known within the ROT and the CoPI and that knowledge was present in the field.	There was no direct or formal line of communication from the ROT to ODs in the field. As a consequence, crucial information about the sinking of the oil was not shared with the Second Duty Officer at DHMR and, without feedback with CoPI or ROT, he took the decision to lift the closure of the port.
VRR	4.3	"Rijkswaterstaat agreed ... for coordination." Proposal to replace this sentence with: *Reference was made within the ROT to the North Sea Oiled Birds Cooperation Agreement, which states that if oiled birds are discovered on the North Sea, Rijkswaterstaat is responsible for coordination. It was eventually agreed within the consultation group to work in the spirit of the cooperation scheme, and it was decided that Rijkswaterstaat would be responsible for coordination of the activities relating to the oiled swans.*	This task distribution was a regular component of the plenary meeting of the ROT in accordance with the standard work approach based on the GRIP regulation. It is therefore not the case that outside the plenary meeting, DHMR addressed a request to Rijkswaterstaat with which request Rijkswaterstaat agreed.	HID RWS indicated that they had experienced as upsetting the fact that other parties had placed responsibility for rescuing the swans with RWS, without consultation and that expectations with regard to bird care varied widely over the first few days. In the ROT logbook, no further statements regarding the swans are recorded other than that the birds had been discovered. There is no reference to consultation on this issue, and in the timeline of the report 'Draft evaluation incident #9358', no reference is made to consultation with regard to the problem of the swans, nor is any reference made in the RWS timeline. LSO RWS indicated in the ROT that the mayors were of the opinion that RWS had not been sufficiently proactive in rescuing the swans, and this opinion was apparently also shared by the VIR directorate.

Party	Paragraph	Text to be corrected (first ... last word)	Comments	Response Dutch Safety Board
VRR	4.5	*"At the site of this incident ..... in water."* *Proposal to replace this passage with:* *On the ground, there was sufficient knowledge about the behaviour of fuel oil in water. This applied both to the affected members in the CoPI and ROT and the affected commanders of the Harbour Master's Division (DHMR) in the Botlek and 3e Petroleumhaven. However, the emergency response crew of the fire brigade and port authority only had access to oil containment screens. This meant that it was understood that only the lighter fractions in the fuel oil on the surface of the water could be prevented from spreading. There was also a clear understanding of the fact that current and wind represented further limitations of the capacity of the screens to contain the oil. This knowledge was also available to the other organizational components of RWS.*	"The characteristics of the various products and their consequences are an integral part of the national teaching curriculum of Duty Officers and Hazardous Substances Advisors (AGS) at the fire brigade. In particular the task of the AGS includes translating the substance characteristics into the most effective and responsible response, including the accompanying safety measures. Given these facts, this problem was already discussed during the first plenary meeting of the ROT, according to information in the LCMS. This knowledge certainly was available. Initially, part of the oil was also spread by tide and wind as a result of the fact that the screens were not yet in position. This may not lead to the conclusion that the other oil spread was not recognized. Neither the fire brigade nor the containment screen pool had resources to prevent or restrict the spread of floating oil residues. "	Text partially altered: At the site of the incident, initially insufficient account was taken of the special situation of freshwater and seawater and the behaviour of fuel oil in the water. The investigation has not revealed information suggesting that actions were taken on the basis of the knowledge that the oil would sink.
VRR	4.5	*"Moreover, ... spread conditions."* *Proposal to add to this sentence:* *This was also used via the liaison from RWS in the ROT.*		This paragraph describes the RWS organization and not the incident *itself.* It is clearly stated elsewhere in the report that this was used. It is also sufficiently clarified that the VRR crisis organization issued an appeal via RWS for spread predictions from LCWM, among others.
VRR	4.5	*"Involvement by ... was desirable, for those reasons."* *Proposal to add to this sentence:* *It is the responsibility of the liaison from RWS, if necessary, to call in the specific knowledge and expertise of other organization components within his organization.*	In accordance with the GRIP regulations, the liaison of an organization or company in the ROT is the linking pin to the relevant organization. The liaison officer then ensures that on the one hand information from the ROT reaches the relevant officers within his own organization and on the other hand that questions and bottlenecks as well as specific knowledge and expertise from the organization are contributed to the ROT.	As standard there is no representative of RWS in the ROT. Depending on the nature of the incident, the RWS representative is invited. In the text, reference is made to the contribution that RWS could have had in respect of the crisis management operation and it is correctly concluded that involvement in the ROT and CoPI was desirable. It does not need to be specifically emphasized that these officers must also bear responsibility for calling in specific knowledge and expertise from RWS.
VRR	4.5	*"The IBP …. responsible for the oil clean-up."* *Proposal to add to this sentence:* *The manual states about pollution of this kind: "In principle, pollution of this kind cannot be cleaned up but measures can be taken for rapidly discharging the polluted water into the sea or some other major water, for example. The substances that are left behind following dispersion can be cleaned up."" In fact, this tactic was deployed.*	Factual addition for clarification.	The fuel oil from the BJ was not a dispersing substance. The information on these substances contained in the manual for incidents on the water is therefore not applicable in this case.
Harbour Master	4.5.3	"... of the VRR" to be replaced by ".... of the Safety Council"	Not of the VRR but of the Safety Council. The correct description appears on page 58, lines 26-32.	This relates to the Incident Management Plan for incidents on the water from the VRR. The Safety Council was involved in the update to the Manual for incidents on the water.
VRR	4.5	*"Fuel oil is one such substance."* *Proposal to add to this sentence:* *The manual suggests that pollution of this kind can in principle not be cleaned up but measures can be taken for rapidly discharging the polluted water into the sea.*	As far as the VRR is aware, and according to the IFV manual, there is no national response perspective available in this situation, other than rapid discharge to the sea.	The fuel oil from the BJ was not a dispersing substance. The information contained about the substances in the manual for incidents on the water is therefore not applicable here.

Party	Paragraph	Text to be corrected (first ... last word)	Comments	Response Dutch Safety Board
VRR	4.6	"A similar …. Rijkswaterstaat." Proposal to replace this with: *Such a picture can be reinforced by the fact that staff of the Rotterdam-Rijnmond Security Region and the Rotterdam Harbour Master's Division are in close contact as a result of the fact that they form part of the permanent membership of the crisis teams. As a result, they meet frequently during exercises and actual incidents. On the other hand, the staff of Rijkswaterstaat are less often involved in exercises and incidents, in addition to which the contact moments are shared among the various duty officers.*	On the basis of the above, the picture may emerge that the work was not carried out on the basis of equality. Within the ROT, however, the main focus was placed on distributing the tasks on the basis of responsibilities, while at the same time taking account of practical implementation. The VRR therefore also recognizes the importance of cooperation on the basis of equality. Nonetheless, officers who meet one another frequently are as a rule able to work together more easily.	No factual inaccuracy, and the addition is an opinion of the VRR, not the conclusion of the Dutch Safety Board.
HEBO	5	Focus through to scenarios	The focus of the oil clean-up operation acquired during previous pollution incidents, in addition to which the response was in line with exercised scenarios.	Makes no substantive addition, and this is the conclusions chapter.
VRR	5	"There was no scenario ... for this situation." Proposal to replace this sentence with: *The IBP does not contain a scenario for oil mixed with harbour water. The emergency services were, however, aware of the fact that there is no tactic for tackling this situation, other than discharge into the sea (or some other major water).*	The fact that a scenario is not elaborated in an IBP does not by definition mean that the emergency services are not prepared for this situation.	The investigation did not reveal that the emergency services were prepared for a non-elaborated scenario, as suggested by the examining party.
Port Authority	5	"that was contracted for this <…> capacity" to be replaced by "was insufficiently effective to hold back the oil mixed with water."	It was not due to the capacity or the volume of the equipment, but its effectiveness. More equipment or a capacity larger than that contracted would not or only to a limited extent have improved the incident management.	The addition refers to retention/containment. However, the text refers to the clean-up operation in the far broader sense of the word.
Port Authority	5	"The Port Authority <..> vital" to be replaced by "DHMR adopted an operational and coordinating role. In respect of incidents, the Port of Rotterdam Authority opted to maintain a clean-up organization and containment screen pool on standby. With an oil spill of a very large scale, excellent cooperation with the other parties and participation by the other parties is nonetheless essential, in order to tackle the oil pollution as effectively as possible."	This description does more justice to the tasks and responsibilities of the various organizations involved.	The operational responsibility is based on formally determined agreements between the parties with a formal responsibility. The word 'bears' ties in with this.
VRR	4.1	"The wellbeing ... 23 June." Suggestion: *The wellbeing of the crew and the management of the damage on board the Bow Jubail was included in the crisis management operation.*	This conclusion is suggestive. We are not certain whether and to what extent the advice reached the crew but the wellbeing of the crew certainly was discussed in the CoPI. Evidence for this can be found in the submitted documents (LCMS report).	There is no information from the LCMS nor from the photographs of the whiteboard taken in the CoPI, nor information from the investigation that the wellbeing on board was discussed and/or taken into account. The fact that the VRR is not aware whether the advice reached the crew says nothing about the factual correctness of this finding.
VRR	4.4	"In addition to major economic consequences …. damage." Proposal to replace this line with: *The closing down of such complex production processes can lead to hazardous situations in addition to environmental damage. If installations have to be closed down quickly, large quantities of intermediate product could be released into the atmosphere via the flares, partially in the form of black smoke clouds. In addition, the closing down of installations of this kind and the resultant long start-up processes can have major economic consequences, which in themselves can involve further risks.*	Given the statutory task of the security region, the primary objective is to prevent the occurrence of hazardous situations, and to limit the possible consequences of incidents. In sequence, the prevention of environmental damage and economic consequences play a role.	Partially accepted: "in the event of the accelerated shutdown of the installations, via flares, large quantities of intermediate products could be released into the atmosphere. This results in environmental damage. In addition, the shutting down of the installations and the resultant long start-up processes result in major economic consequences."

Party	Paragraph	Text to be corrected (first ... last word)	Comments	Response Dutch Safety Board
Harbour Master	4.5.2	This paragraph refers to insufficient knowledge among others of DHMR commanders. This is an inaccurate conclusion, see the previous comments about the spread behaviour of (fuel) oil, and that it was clearly indicated that this oil will sink, and spread underwater. Text proposal: "At the incident site, initially, insufficient account was taken of the special situation of freshwater and seawater, and the behaviour of fuel oil in the water, despite the fact that this had been previously addressed."	The DHMR First Duty Officer, both on the waterside and in the CoPI, on several occasions referred to the characteristics of this type of oil in relation to the effect areas. However, because the conclusion of the first models by the LCWM were accepted as accurate, until such time as aerial photographs from both the Police helicopter and the Coastguard aircraft became available, the response was based on this information, and the information provided by the DHMR First Duty Officer was ignored.	This argumentation is incorrect. The alteration to the text has partly been accepted: At the location of the incident, in the first instance, insufficient account was taken of the special situation of freshwater and seawater and the behaviour of the fuel oil in the water. Nowhere does the investigation indicate that actions were taken based on the knowledge that this oil would sink.
VRR	4.6	"The various parties .... oil spill." Proposal to replace this sentence with: *Among certain parties there may well have been the picture that Rijkswaterstaat above all had a supporting role in the event of an oil spill. However, for the Regional Operational Commander, this was by no means the case, because in his training, specific attention had been focused on the responsibilities and authorities of the general column, in relation to the functional columns. However, the picture may have arisen because unlike the Rotterdam Harbour Master's Division, Rijkswaterstaat is not a permanent member of the various crisis teams.*	The picture was not that Rijkswaterstaat had a supporting role, but that on that Saturday and Sunday, Rijkswaterstaat either had insufficient strength or lacked the necessary capacity to mobilize the necessary strength. The various parties then attempted to fill the 'gap' (including the Port of Rotterdam Authority and the Rotterdam-Rijnmond Security Region).	The argumentation by the examining party is factually incorrect. Partially accepted: Among certain parties the picture may have arisen that in the event of an oil spill in the port of Rotterdam, Rijkswaterstaat mainly had a supporting role. However, this picture may have emerged because unlike DHMR, RWS is not a permanent member of the various crisis teams. Added after oil spill ...'' in the port of Rotterdam."
HEBO	5	This strategy up to and including containment.	In this case, this strategy was less effective given the fact that the screens were only able to partially retain the floating layer. The oil floating in the water could not be contained. The location of the collision and pollution made the situation extremely complex. The freshwater seawater balance at that point meant that scenarios trained for in only freshwater or seawater were not sufficient. In that regard, the people responsible for the oil clean-up were not trained to respond to the behaviour of the oil in these circumstances.	Refer to comment above.
Harbour Master	5	The VRR, DHMR and Rijkswaterstaat all have a statutory task in the event of oil pollution in the water. The vast majority of the operational responsibility for oil clean-up is held by the Harbour Master's Division of the Port Authority. In the event of an oil spill of this size, cooperation with other parties is essential in order to tackle the oil pollution as effectively as possible. This need for cooperation also applies to the VRR and Rijkswaterstaat.	This nuance does more justice to the conclusion.	Nuancing partially accepted (first part is accepted, second part not because it unnecessarily weakens the conclusion).