

## **Decontamination and Site Security during the Prestige Response**

**Wayne O'Brien  
Duty Manager  
Oil Spill Response Limited  
Lower William Street  
Southampton  
SO14 5QE**

### **Abstract**

Decontamination and site security are crucial yet often overlooked aspects of many responses. The ability to minimise secondary contamination and control the access onsite for responders, equipment and the many personnel visiting the site will have a major impact on the success of the operation.

Vehicles operating on and offsite, responders carrying out inadequate decontamination and visitors moving through the site without sufficient awareness of the hazards are all contributing factors. The spread of oil, health and safety issues and risks to environmentally sensitive areas not yet contaminated are important considerations when conducting the clean up operation.

The Prestige spill presented many challenges in these areas due to the large numbers of volunteer personnel involved in the clean up operation. The combination of mechanical / manual recovery operating simultaneously over a wide area and the intense media and public interest.

The personnel operating onsite required briefing and training before any operations were carried out, with 600 people operating onsite at the height of the response. To successfully manage the decontamination and site access was an ongoing challenge that required flexible planning and co-ordination of the various recovery sites.

In this paper the author examines the response operation carried out by OSRL at the Simpron cove beach sites. This area was one of the most heavily polluted and sensitive areas operated in Spain. The paper will identify the methods used to develop and manage the site security and decontamination for response.

## **Decontamination and Site Security during the Prestige Response**

**Author**  
**Wayne O'Brien**  
**Duty Manager**  
**Oil Spill Response Limited**  
**Lower William Street**  
**Southampton**  
**SO14 5QE**

### **Background**

One of OSRL's major task's during the Prestige response was to carry out a shoreline cleaning operation at Playa Da Simpron located near the village of Lira in the province of Galicia, Spain. This site was one of the most heavily contaminated and given the highest priority for clean-up during the response due to the close proximity of a multi-million dollar mariculture facility.

The site is a mixture of rocky shoreline and sandy beach exposed to high wind and wave activity. The lack of adequate roads or tracks combined with inaccessible marsh areas and rocky headland severely restricted personnel and vehicle access.

OSRL's responsibility was to recover the bulk oil from the water and protect the water intakes for the mariculture facility. Initial clean-up activities for OSRL comprised of limited manual and mechanical recovery within the area adjacent to the mariculture facility. Manual recovery was carried out by Belgian Emergency Services who later assisted with managing the work zone. Priority was given to the development of a shoreline clean-up plan designed to co-ordinate large-scale recovery on multiple sites. The plan was designed as a dynamic document to allow flexibility to manage the daily operational challenges.

### **Site Response Plan**

The shoreline clean-up plan was developed by the on-site OSRL's Beachmaster with final review and approval by the Prestige Response Committee in La Coruna. To develop the plan it was necessary to conduct shoreline surveys and assessments, identifying degree of contamination, socio-political and ecologically sensitive areas, recovery points, access routes, short-term waste storage sites and decontamination zones. These assessments formed the backbone of the plan completed by the addition of a command and control structure, logistics, communications, waste removal and disposal, health and safety, media and community liaison and site security.

The beach was divided into five zones to allow controlled escalation of personnel operating on-site. Due to the limited access to shoreline areas it was necessary to build a road capable of supporting heavy vehicle operations and personnel. This resulted in each zone commencing as the road progressed, permitting logistical and operational support time to develop as the response grew.

### **Implementation**

Once the plan was approved the implementation could begin, the key issues that had to be addressed were those of site security and decontamination, whilst they are important

factors in any response, certain aspects of the response gave these elements increased significance and became key drivers in the response effort.

The challenges were:

- Large untrained workforce estimated to peak at 600 personnel.
- Intense media interest in the clean up operation.
- The proximity to the local town of Lira and the main coastal highway.
- The large numbers of volunteers wanting to assist.
- Ecological sensitivities onsite adjacent to the cleaning zones.
- The large number of vehicles operating onsite on a temporary road.
- The integrity of the trucks and skips used for waste removal and distance to the final disposal site.

As the whole response operation is based on Net Environmental Benefit Analysis it was crucial that the clean up operation did not cause further damage to the environment or spread the oil to areas not already contaminated. Once the above challenges had been identified it was then possible to identify strategies to eliminate, isolate or minimise the risk presented by each one.

### **Workforce Management and Decontamination**

After identifying the number of personnel that could effectively work at the site, it was decided to utilise Spanish Military personnel, this was perhaps one of the key factors for the site running as efficiently and effectively as it did. Whilst there were large numbers of volunteers willing to work on the site, which offered benefits in terms of local integration and satisfying the vested interest that they have in the area, their utility was outweighed by the simple fact that the military have an existing Command and Control structure. With the work site spread over two kilometres, a workforce expected to peak at six hundred personnel that could change daily, and six OSRL staff to train personnel and manage the site, this was a factor that could not be overlooked. By combining both OSRL's incident management structure and the military command structure the training, briefing and management of the work teams could be carried out with the minimum of OSRL personnel involved.

The work zones were allocated to specific companies of one hundred and twenty personnel with one officer in charge of each company. These officers were then briefed in the daily work requirements and procedures for the issue and use of PPE, waste management and decontamination at the end of the day, they then in turn briefed their personnel.

OSRL provide zone supervisors who roamed between the sites ensuring that correct zone entry and decontamination procedures were followed and that relevant logistical support was provided. All of the personnel were dressed in full PPE at a central command point and sent to each site once inspected, each site had one point of entry and exit with the exit point having PPE and waste reception facilities and shelter for the work force. The shelter was especially important due to the harsh weather conditions encountered at this time of year and allowed the work force to rest and eat out of the elements.

All PPE provided, with exception of boots and gloves, were disposable items. This in itself caused problems in ensuring that sufficient stocks were available on a daily basis, but equally that they were disposed of appropriately with correct waste segregation. After some trial and error it was found that employing a local team of volunteers to roam the site

and assist with decontamination, bag any loose litter and secure the waste bags generated, a waste free site was created and it allowed local input into the response effort.

The decontamination of the workforce was a continuing challenge throughout the response due to the large number of personnel involved, the large volume of waste generated, storage of cleaned items, the changing workforce and the harsh environmental conditions. Reasonably the workforce wanted to leave the work site as soon as work had completed for the day. The management of this became one of the major tasks for the OSRL staff; the setting up of each zone began almost as soon as the work teams had begun their days work. Each zone also had a team of military personnel who were primarily responsible for decontaminating the work force under the direction of OSRL.

Not only was decontamination required for the personnel working onsite it quickly became apparent that the trucks transporting the recovered oil from each zone to the waste disposal site needed careful monitoring due to overloading of the trucks and the integrity of the storage. Again briefing of the transport staff and monitoring of the loading helped minimise this problem. A combination of five tonne waste skips and fifteen tonne dump trucks were used to haul the waste from the site. All of the large trucks were lined with plastic whilst the smaller skips were sealed using expanding foam, to minimise any spillage.

### **Site Security**

Site Security was also a key factor in the success of the operation, management of personnel entering the site and the work zones became increasingly challenging as the scale of the operation grew. From the start of the operation a senior OSRL staff member was placed in overall charge of site security, managing the various agencies involved with and conducting the majority of media interviews, thereby reducing the workload on the Beachmaster.

Again where possible, military personnel and the Civil Police were used to control entry and exit points to the sites. This ensured that the many vehicles entering the site followed a planned route to ensure minimum disruption to the heavy vehicles hauling waste, which reached a peak of forty-eight trucks. As the response grew from one zone to five, it quickly became apparent that a co-ordinated transport plan was required to keep the small road as free of congestion as possible. In order to reduce the delay in the removal and replacement of the waste skips to each work zone. This was found to not only improve the efficiency of the response but maintain the morale of the work force who lost motivation if long delays in the provision of empty waste containers occurred. Not only were the various vehicles providing logistic support, waste removal, medical support, road maintenance and media accounted for, but also the many helicopters visiting the site with military staff and dignitaries had to be accommodated.

The decision was made at the beginning of the response not to restrict local people and media from entering the site. It was instead decided to treat the local people as stakeholders in the response and work with the media as much as possible to ensure that the reporting of the response operation would be as accurate and positive as possible. Whilst at times this became difficult to manage, it paid dividends in terms of local support and media coverage. The staff controlling entry and exit points and transport movements were fully briefed so that everyone understood the plans, this was essential to smooth progress. All personnel entering the sites were also briefed on areas that they were allowed to enter in order to eliminate the spread of oil and maintain the safety to all personnel onsite.

The OSRL site security manager and command staff was dressed in high visibility clothing to make them readily identifiable. They were in constant communication with the security points and constantly roaming the site using all terrain vehicles to provide any support required. This meant that there was not only a visible presence on site but also that the managers were easily contactable and mobile should a problem occur.

As the response entered the festive season over Christmas, the site security was put under intense pressure due to the people on holiday wanting to visit the site and assist with the clean up operation. However the policy of using only military personnel was maintained and through sensitive management and discussions with the various visitors, no problems were encountered. The fact that over two thousand different personnel and heavy machinery operated onsite over a four-week period in winter with no lost time injuries was a testament to the planning and management of site safety and security.

### **Lessons Learnt**

As with any response the lessons learnt can help to improve the way in which we respond and become more effective and efficient. Whilst there were many areas from the Prestige response that provided valuable knowledge in responding to high viscosity spills, the two element's of site security and decontamination had a major impact in the success of the operation at Playa Da Simpron.

The main factors affecting them were:

- Utilising existing skills and management structures when choosing the workforce.
- Integrate the command and control structure leaving all parties with clear responsibilities.
- Build flexibility into the plan and structure, invariably there will be more/less personnel than expected – “things will change at short notice, be prepared to change with it”
- Build the response to match the support available, there will be pressure to expand rapidly. Start small and escalate as the logistics improve.
- Keep one or two clean personnel at each site to assist with any problems, these can leave the work zone without going through full decontamination procedure.
- Ensure that all personnel are briefed in the correct procedures for entering and exiting the site and work zones.
- Do not commence work until all briefings have been completed.
- Work sites and entry/exit routes need to be clearly identified. Fenced off where possible.
- Stagger the completion of the working day if dealing with multiple sites.
- Train personnel to set-up and manage the decontamination zones.
- Designate someone to be responsible for site security and to handle the media. Have a clear plan for both.
- Have a clear policy for dealing with visitors on site, issue PPE and escort them on and off site.
- Carry out inspections and decontamination on vehicles exiting the work site.
- Develop a simple transport plan to deal with vehicle movements and waste handling.