



MDA Oil Tracker™ Rapid Alert Monitoring Service

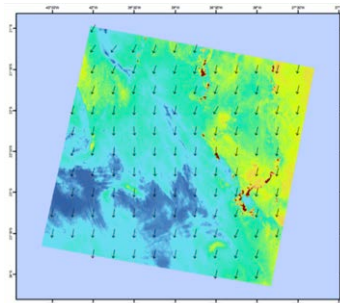
MDA Oil Tracker™ Rapid Alert (Rapid Alert) service provides offshore operators with near real-time alerts of oil-on-water incidents that may impact their operations.

In the current regulatory and public environment, oil-on-water events near offshore oil and gas operations have high visibility. Regardless of the source of oil, operators are at risk if they can't provide evidence of responsible operations. These challenges significantly increase in the first 24 to 48 hours when an oil spill incident does occur. Those first hours are key to an effective operational response and successful stakeholder communications.

Routine broad area monitoring of offshore installations by satellites is a proven technology that increases awareness of oil-on-water occurrences that may be due to natural seep activity, oil originating from nearby operations, or illegal dumping by vessels in the area. This service also increases the ability to quickly respond in the case of an emergency to mitigate the impacts of a spill.

MDA has been working with offshore operators for over 18 years and has developed a cost effective service that addresses the needs of the industry: MDA Oil Tracker™ Rapid Alert.

Rapid Alert includes the regular acquisition and archiving of RADAR imagery over the customer's area of interest and adds near real-time image analysis and reporting of oil-on-water events. Offshore operators are provided event information as quickly as it is available.



MDA Oil Tracker™ Reports combine satellite imagery with expert analysis to identify oil-on-water and its likely source, as shown in the image on the left. This can be combined with sea surface information including wind, as shown in the image on the right.

Experienced analysts review each satellite acquisition immediately following downlink at the MDA processing facility. The image is reviewed to identify possible oil-on-water within a pre-defined area of focus around operating facilities. If the analysis indicates the presence of oil, a Rapid Alert showing the location and extent of oil near key facilities will be issued to a pre-defined list of recipients on the operator's team.

This service can complement the operator's oil detection capabilities as well as identify oil-on-water events beyond the range of the facility's detection systems. MDA quickly follows up with the delivery of a MDA Oil Tracker™ Report showing the full size satellite image, the oil-on-water analysis results, and, when available, wind information derived from the SAR imagery.

The types of oil-on-water events that trigger Rapid Alerts can be customized based on the risks and operating conditions in different areas.

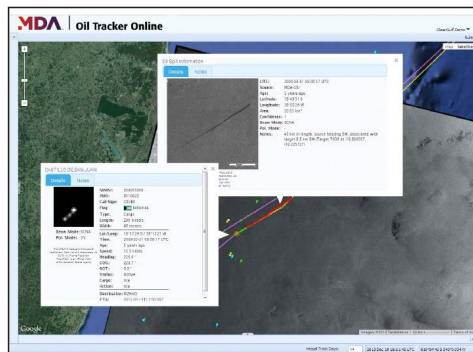
A key distinction of the Rapid Alert service is that operators are not overloaded with oil-free imagery that is not operationally relevant. This allows the service to offer great value by combining imagery and service at a lower cost than imagery alone.

Included with the Rapid Alert service is access to the MDA Oil Tracker™ Online common operating picture environment. This web-based information portal allows operators and responders to rapidly and easily:

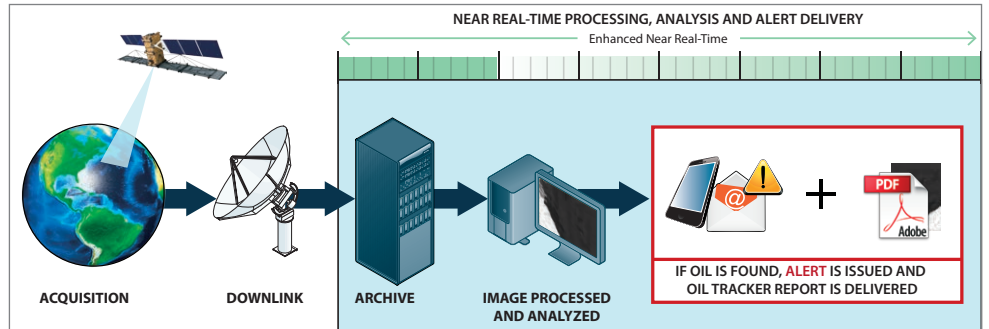
- Combine satellite-derived information with other near real-time information (e.g., aerial, in-situ)
- See detailed vessel information with integrated AIS and IHS data feeds (optional)
- Overlay proprietary data (e.g., infrastructure, asset depots, environmental mapping, etc.) in a secure environment
- Select specific data items to share with other members of their trusted network

MDA Oil Tracker™ Rapid Alert Service Benefits

Feature	Benefits to Operator
Routine monitoring in all weather	Know More – see all forms of oil on water near key offshore facilities
	See Always – information is available regardless of cloud cover or daylight
	Save and Protect – use the broad area view to better use high-cost aerial/vessel assets while keeping staff out of harm’s way
Pre-programming of satellite data	Know Sooner – Information available up to 48h earlier than in traditional incident response programs
	React Faster - speeds emergency response and provides historical protection
24/7 MDA Oil Tracker™ emergency response center	True Global Support – direct access to MDA’s operational center from any time zone when you need it most
	Operator Direct – MDA controls RADARSAT-2 and provides the most flexible satellite coverage available
Rapid, reliable oil-on-water analysis	Know More – MDA’s experienced analyst team can distinguish oil sources, identify key metocean/weather phenomena, and help your team understand the results
Effective Rapid Alert Notifications	Know Sooner – Rapid Alert via e-mail or SMS when oil-on-water is seen
	Operational Information – a compact message with visual context and details of the location, size, and likely source of the oil-on-water event
GIS-ready outputs	Easy Integration – MDA Oil Tracker™ outputs all utilize industry-standard file formats and ready to integrate into an enterprise GIS and Common Operating Picture (COP)



MDA Oil Tracker™ Online combines satellite imaging with streaming AIS, infrastructure map layers, and other response information to provide a common operating picture for operational users. This image shows an example of oil dumped from a ship near a coastline. The insets provide details on the ship and oil slick.



Rapid Alert provides essential analysis results via a cost-efficient service model to deliver information to an area of operation only when it is relevant.



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