New York State’s Inland Geographic Response Plans

Geographic Response Plans (GRPs) are location-specific plans developed to provide guidance for oil spill responses throughout the United States. Until recently, the majority of crude oil transportation in the United States has occurred via pipelines as opposed to tankers and barges, therefore, most existing GRPs focus on the protection of sensitive biological habitats and socio-economic factors in marine environments. The recent development of crude oil extraction from the Bakken formation has resulted in a significant increase in the volume of crude oil being transported via railroads and pipelines and has heightened the need for inland response planning. Much of this increase in crude-by-rail volume is transported through New York State on two major Class 1 railroads (50+ miles).

In response to this large increase in crude-by-rail traffic, the Governor of New York issued Executive Order 135 directing the agencies to develop plans and strategies to prepare for spills involving crude oil transportation. New York State’s Inland Geographic Response Plans (GRPs) were developed to address these concerns.

The NYSDEC will organize GRP-based training and exercises for each of the 21 potentially affected counties. The NYSDEC will update GRPs every three years. The NYSDEC can update GRPs on an expedited basis if conditions warrant.

The majority of the field-verified response strategy types include underwater dams, dikes, decontamination, and collection boom - place boom downstream.

The NYSDEC GRPs are similar to typical GRPs in that they are map-based, location-specific contingency plans that are developed by each of the 21 potentially affected counties.

The NYSDEC will update GRPs every three years.

The Site-specific GRPs are the highest resolution response plans. The Site-specific GRPs will be reviewed and updated by the NYSDEC, coupled with local steering committee input, location-specific response plans were identified.

The GRP locations were selected by the county steering committees and are generally located in areas of high human population density. In addition to sensitive environmental resources and booming strategies, these plans identify the locations of sensitive human receptors (eg, schools, daycare centers, assisted living centers, etc.), critical infrastructures, and the suppression assets. The backside of the GRP provides a general checklist of response considerations, a list of agency and industry notification numbers, the address for the suppression resources, and phone numbers for each sensitive receptor facility within a mile radius. There are 344 GRPs for the 859 miles of potential affected NYS rail track.

Response Strategy (site/city): Most of the site-specific GRPs contain response strategies developed to stop the movement of released product on surface water. These response strategies were first tentatively identified via a decision analysis in dendrogram surface water bodies accessible to first responders (usually at road crossings). Tentative response strategies are termed “boominng opportunities”. Next, these booming opportunities were field-tested and adjusted as needed. Site-specific data (photographs, site drawings, staging areas, resources at risk, type of site, etc) was collected for each booming opportunity and this information was used to develop a response strategy. To date, 323 booming opportunities have been identified and 312 have been field-verified. The majority of the field-verified response strategy types include underwater dams, dikes, decontamination, or containment.

The NYSDEC GRPs are similar to typical GRPs in that they are map-based, location-specific contingency plans that outline response strategies for the protection of sensitive resources. However, the NYSDEC GRPs differ from traditional GRPs in several ways. They extend contingency planning to cover spills on land in addition to surface water-based spills. Due to the flammability of Bakken crude oil, much more emphasis is placed on the fire risks associated with a train derailment. This is done by mapping sensitive human receptors, critical infrastructures, and identity risk (and water) suppression assets. The NYSDEC GRPs also place more emphasis on the initial response options available to local first responders, options that can be implemented before other response assets may arrive on-scene (State, Federal, and Responsible Party).

Additional Program Components:

- The NYSDEC will update GRPs every three years.
- Counties will receive GRPs in multiple formats (pdf, kml, mxd).
- Counties are encouraged to update GRPs on an as-needed basis.
- The NYSDEC will supply emergency response trailers to all 21 potentially affected counties.
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