

The National Oil and Hazardous
Substances Pollution Contingency
Plan, Subpart J Product Schedule

History and Proposed Rule Changes

40 CFR 300.900

The National Oil and Hazardous Substances Pollution Contingency Plan, Subpart J Product Schedule

In the Beginning...

WHY A PRODUCT SCHEDULE?

- 1967, the *Torrey Canyon* wrecked off the coast of England oiling many prime holiday beaches 95,000 tons (593,750 barrels) of oil released into the ocean.
- 10,000 tons (66,000 barrels) of chemicals were used to attempt to remove the oil from the impacted shorelines.
 - actually degreasing agents containing over 60% highly toxic aromatic solvents.











Kenneth Biglane

Director of U.S. Oil and Special Materials Control Div.

- Flew to the spill and witnessed what he described as severe misuse of chemical cleaning agents.
- He said that anyone who was able to carry hoses, back pumps, portable pumps etc...were pressed into service. He saw damage to the biota to the extent he never witnessed before.
- Coastal hotels were approached by salesman and were encouraged to use these materials on their oil contaminated beaches much to their regret as they helped to cause erosion of those very beaches.

In June of 1968, President Johnson:

- Directed the Secretaries of DOD, DOI, and DOT, and the Director of the U.S. Office of Science and Technology
 - to assume special responsibilities to complete a multi-agency contingency plan in order to strengthen this Nation's preparedness to act in the event of an oil spill pollution emergency along our coast and waterways.
 - Chemical dispersants were being highly touted by industry
 - each week DOT, DOD, and DOI were besieged by chemical salesmen, who wandered in off the street or were sent by Congressmen and showed up on-scene at most spills.
 - Newspapers would report about a “marvelous potion” and spend many hours interviewing the few federal experts that knew about them....Fred????

Product Schedule born in 1970

(Nick Nichols born 4/30/1970, was it fate?)

- April of 1970, Congress passed the Federal Water Pollution Control Act included a National Contingency Plan (NCP),
- Further Congress called for a schedule of chemicals for use on spills to be prepared.
- Mr. Biglane convened a task force at EPA with six state water pollution control administrators...the Product Schedule was born.

Product Schedule last revised in 1994

Subpart J applies to navigable waters of the U.S. and adjoining shorelines;

- the waters of the contiguous zone, and the high seas beyond the contiguous zone in connection with activities under the Outer Continental Shelf Lands Act;
- activities under the Deepwater Port Act of 1974, or activities that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States;
- Magnuson Fishery Conservation and Management Act of 1976.

The authority to use alternative countermeasures on oil spills is granted within the NCP under section 300.910

- **New changes in about a year...details at end of class.**





HOW DO YOU GET ON THE LIST?

- i **General:** Short version of MSDS, Screen for Heavy Metals, Screen for Chlorinated Hydrocarbons, Toxicity tests
- i **Bioremediation Agents:** Screen for Pathogens, 28-day Effectiveness (saltwater) Test
- i **Dispersants:** Swirling Flask Test- Dispersant Effectiveness Test (saltwater)

BIOREMEDIATION AGENTS

- i Microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge
- i Bioremediation agents are typically used as a polishing step after conventional mechanical cleanup options have been applied
- i NOT an open water tool



DISPERSANTS

- i Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column



SURFACE WASHING AGENTS

- i Any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column
- i Surface washing agents are those where the released oil is (ideally) not dispersed but readily floats on the water surface and is recoverable.



SURFACE COLLECTING AGENTS

- ï ì Herding agentsî
 - ñ Not very effective in the field
- ï There are no products under this category
- ï We propose to eliminate this category and incorporate future products under miscellaneous oil spill control agents

MISCELLANEOUS OIL SPILL CONTROL AGENTS

- i Any product, other than a dispersant, sinking agent, surface washing agent, surface collecting agent, bioremediation agent, burning agent, or chem/bio based sorbent that can be used to enhance oil spill cleanup, removal, treatment, or migration
- i Products include: emulsifiers, elastizers, chemical based sorbents, solidifiers

AUTHORITY TO USE PRODUCTS

- i Dispersants ñ EPA rep to RRT, Coast Guard OSC, State with consultation from Regional Response Team trustees
- i All other agents EPA rep, OSC, and State with consultation
- i There is no federal mandate to use products on the schedule, however, RRTs/area planners shall address, as part of their planning activities, the desirability of using appropriate products

Human/Environmental Health Issues

- Endocrine disruptors - surfactants
- Proper PPE not being worn
- Full MSDS is needed
- No toxicity threshold

Proposed changes for Subpart J

- Improved efficacy testing for dispersants and bioremediation agents
 - Raise threshold for acceptance from 50% to ?
 - Reduce burden for bio agents
 - Offer option to test with salt or freshwater

Proposed changes

- Clarify/add definitions of the product categories
 - product manufacturers can properly categorize their products for specific uses
 - responders can make a more informed decision on which product to use in oil spill mitigation situations.

- Require that all products, meeting the definition of solidifier, must be listed on the Schedule as a MOSCA.
 - Actually a clarification as all chemical agents need to be listed.
 - will apply to products that were removed from the Schedule due to their sorbent characteristics.

- proposes that manufacturers explain in their Surface Washing Agent (SWA) application instructions the proper way to contain runoff from the use of SWAs on oil spills
- proposes to require manufacturers to provide a MSDS for their products

- Clarify listing requirements for bioremediation agents and the use of fertilizers on spills. Specifically:
 - agents be tested for effectiveness using the updated and revised protocol
 - to clarify EPA’s practice and application authorization for use of common fertilizers on oil spills.
 - to add a requirement for freshwater-based efficacy test, in addition to the current saltwater based test.

- proposes a freshwater toxicity test, using two freshwater organisms, except dispersants.
- asking for recommendations on how to test a solid product for toxicity
- proposes to clarify how we will list a product that is considered a “mixed product”
 - proposing to list under one category only (current practice), instead of multiple categories

- EPA proposes to establish additional criteria and circumstances that would allow EPA to remove a product from the Schedule.
 - (1) Committed fraud or misrepresentation in providing any information to any person regarding the use of the product to remove or control oil discharges; or
 - (2) Submitted false or incomplete information to EPA, in relation to the addition or composition of the product; or
 - (3) On any label, advertisement, or technical literature, communicated any information (either orally or in writing) regarding the product in contravention of §300.910.

- proposes to require notification when a product is used by any person except an OSC
- asking for information on the effects of surfactants in the water column
 - this includes endocrine disruptors
 - OSCs can use this information for determining net environmental benefit

- asking for comments on the use of sinking agents for non-petroleum, veggie spills only.
- the current regulation prohibits the use of sinking agents for application to oil discharges.
 - research shows (ORD supports) that application of iron filings, clay etc. could help degrade oil

QUESTIONS?

SUGGESTIONS?