Reynolds Metals Company Site No. 6-45-009
Administrative Record

RESPONSIVENESS SUMMARY

Comments Generated on Proposed Amendment to the Record of Decision

The following comments were made during the public meeting on May 17, 1995 or were submitted in writing prior to the end of the public comment period:

1. Mr. Dave Arquette (Public Meeting), and Mr. Ken Jock, Director, Saint Regis Mohawk Tribe, (letter dated May 31, 1995)

CAPPING VS. TREATMENT

a. **QUESTION/COMMENT:** In general, the St. Regis Mohawk Tribe (SRMT) agrees with the NYSDEC decision to dispose of the highly contaminated material in a TSCA or RCRA approved landfill instead of on-site treatment. The SRMT disagrees with allowing RMC to contain soils less than 50 ppm PCBs instead of 25 ppm as stated in the current ROD. The Tribe feels all contaminated material should be included for off-site disposal, not just soils contaminated with PCBs at levels of 50 ppm or greater.

**DEPARTMENT'S RESPONSE:** Conditions at the landfill are favorable for containment of residuals that have only low levels of contamination, and the proposed action exceeds USEPA recommendations for containment of waste at this contamination level. The 50 ppm PCB level is that which identifies the contaminated material as being a hazardous waste. The USEPA guidance document entitled Guidance on Remedial Actions for Superfund Sites with PCB Contamination considers soils containing PCB levels less than 50 ppm "low-threat" material. The USEPA considers risks to and protection of, human health and the environment in making a significant threat determination.

NYSDEC's preference is to maximize space in off-site secure landfills for hazardous waste disposal. This can be accomplished by containing on-site as much of the low-threat, non-hazardous material as is feasible without significantly increasing risks to human health and the environment. According to USEPA guidance on remediation of PCB contaminated sites, soils containing PCB levels less than 50 ppm pose no significant increase in risk to public health and the environment when contained as proposed in RMC's on-site landfill.

b. **QUESTION/COMMENT:** If the Reynolds Metals Company (RMC) is allowed to contain contaminated soils with PCB levels less than 50 ppm in their on-site landfill, what measures will be taken to prevent the migration of contamination?

**DEPARTMENT'S RESPONSE:** A new leachate collection system will be installed which will be "keyed" into a low permeability clay layer to prevent leachate and contaminated groundwater from migrating from underneath the landfill and entering the wetlands. Once all low level waste is consolidated into the site, a multi-layer, low permeability cap will be installed. The cap will be a composite design made of geosynthetic liner and a low permeability soil cover and drainage layer. The cap will essentially eliminate the percolation of rain water into the waste mass underneath and thus the generation of leachate will be eventually reduced to very low levels. A long term monitoring plan will be implemented which includes downgradient groundwater monitoring to ensure the remedy is functioning as designed.

c. **QUESTION/COMMENT:** The NYSDEC considers solidification and capping of hazardous waste a permanent treatment technology. The SRMT does not agree with this methodology.

**DEPARTMENT'S RESPONSE:** Solidification/chemical fixation of contaminated soils is not considered a permanent treatment technology at the RMC site. Pretreatment of soils will occur to dewater and stabilize the material for purposes of constructing a solid subbase for capping.

d. **QUESTION/COMMENT:** What is the scientific rationale to justify there will be no increased risks in changing the treatment level from 25 ppm to 50 ppm? What are the risks that were looked at in the decision making process?

If NYSDEC just looked at cancer risks, then they are missing the big picture. Studies have shown that PCBs exposed at low levels can cause alterations in neurobehavioral function in the immune system, disruption in reproduction, hormonal effects and other non-carcinogenic effects.

As long as we keep the PCB waste in the ground, there will always be risks of migration out into the environment. If you allow higher levels and increase the volume to be contained on site, then you are increasing the risks to human health and the environment.

NYSDEC has only factored in costs in this decision. RMC is the only party that benefits from this decision by saving $9.9 million dollars, while the environment still suffers.

**DEPARTMENT'S RESPONSE:** The evaluation of RMC's request to modify the ROD was performed the same way the original remedial alternatives were evaluated during the RI/FS phase of the remedial program. The development and screening of the alternatives outlined in RMC's request, the detailed analysis of the alternatives

and the subsequent selection of the preferred alternative all conformed to the NYSDEC's Technical and Administrative Guidance Memoranda No. HWR-90-4030 entitled Selection of Remedial Actions at Inactive Hazardous Sites. This selection process is designed to meet the overall NYSDEC goal of protecting public health and the environment.

According to USEPA's Guidance on Remedial Action for Superfund Sites with PCB Contamination the same controls for the on-site landfill (leachate collection system, composite cap, and longterm monitoring) that were considered and approved under the original ROD to contain soils with PCB levels less than 25 ppm can provide the same protection to the public health and the environment for soils containing PCBs at levels less than 50 ppm at no significant increase in risk to public and the environment. The rationale to justify this opinion focused on migration pathways and the ability of PCBs to migrate from the contaminated soils to the leachate/groundwater and the potential for worker/public contact with contaminated soils. While the PCB concentrations and volumes of contaminated soils in the landfill will increase slightly, the elimination of migration pathways and potential for workers and the public to come into contact with contaminated soils is eliminated under both scenarios. Therefore there is no significant increase in risks.

NORTH YARD AREA

e. **QUESTION/COMMENT:** The SRMT disagrees with NYSDEC decision to excavate within the pre-defined horizontal limit of 100 ppm of PCBs. NYSDEC has reduced the area of remediation in the southern portion in the North Yard area, and in doing so, has increased the risks to human health and the environment.

The SRMT recommends establishing a 25 ppm pre-defined horizontal limit of PCBs and placing an asphalt cap over materials less than 25 ppm of PCBs left in place. The asphalt cap is not a reliable capping material, therefore we recommend the lower cleanup level in this area.

We are increasing the risks to the environment if the asphalt cap or the groundwater recovery wells fail. We should minimize the risks of any releases to the environment.

**DEPARTMENT'S RESPONSE:** As mentioned above, the NYSDEC's overriding concern in considering RMC's request to modify the ROD was the protection of public health and the environment. The North Yard design modification mostly affects the southern portion of the North Yard where the current surface water/groundwater collection and treatment system is located. This collection/treatment system will be upgraded and remain operational. RMC will be required to perform longterm monitoring and maintenance activities that will ensure satisfactory operation of both the asphalt cap and the groundwater/surface water

collection system in the North Yard for as long as contaminated soils are present. In the future, during closure of the plant, RMC will be required to perform final remediation of the North Yard. With the construction of the asphalt cap, the groundwater/surface water migration pathways and the potential for worker/public contact with contaminated soils will both be satisfactorily addressed. Therefore, it is the NYSDEC's opinion that there will be no significant increase in risks.

f. **QUESTION/COMMENT:** Are there other contaminants (other than PCBs) in the North Yard that are of concern, and what will be done to remediate those contaminants?

**DEPARTMENT'S RESPONSE:** Yes, there are other contaminants of concern in the North Yard. During the remedial investigation, low levels of polychlorinated di-benzo dioxins (PCDD) and polychlorinated di-benzo furans (PCDF) were discovered in the soils around the pitch pump house and piping bridge of the North Yard. It is believed that the source of these contaminants is from the heating of PCB contaminated pitch. This area is within the 100 ppm PCB isoconcentration excavation area and the low levels of PCDDs and PCDFs will be excavated along with the PCB contaminated soils and transported off-site for disposal in a secure landfill.

g. **QUESTION/COMMENT:** The SRMT recommends a cleanup level of 1 ppm in the northern portion of the North Yard. The 10 ppm allows a greater risk of recontamination in areas that were remediated and determined clean, such as the Area North of Haverstock Road and the drainage ditches leading to the St. Lawrence River.

The northern portion to be excavated is outside the containment area of the groundwater recovery wells, therefore a lower cleanup level of 1 ppm is recommended for better protection of human health and the environment.

In conclusion, NYSDEC should be implementing the best available technology to permanently dispose of PCBs at the RMC site. We have an opportunity to permanently get rid of PCBs from our environment.

We can no longer gamble or take risks with our children's future. As long as the PCBs remain in the soil, we are jeopardizing their future and the environment.

**DEPARTMENT'S RESPONSE:** The cleanup goal described in the existing ROD will remain unchanged in the ROD amendment. The northern portion of the North Yard is located in a surface water management area. Therefore the cleanup goal for PCBs is 10 ppm. Migration of contaminated groundwater is not considered a significant threat due to the very low permeability soils in this area. Contaminant migration via sediments in the surface water runoff is of primary concern. Surface water runoff from this area is managed within the previously remediated 006 SPDES

outfall drainage basin. Surface water flows into the drainageway along the south side of Haverstock Road and is collected in a catch basin. From the catch basin it is pumped to the North Yard Granulated Activated Carbon treatment system for treatment and subsequent discharge. Discharge limits must meet RMC's SPDES permit limits. During remedial excavation, RMC will be required to install satisfactory controls to eliminate the potential for migration of contaminants to the previously remediated areas including North of Haverstock Road and the drainage ditches leading the St. Lawrence River.

2. Mr. Robin McClellan, Great Lakes United (Public Meeting)

a. **QUESTION/COMMENT:** Regarding the North Yard design change; is it proposed to cap over contaminated soils with PCB levels over 500 ppm?

**DEPARTMENT'S RESPONSE:** No, the proposed design change will require all excavated soils within a predefined horizontal and vertical limit to be contained on site if PCB levels are less than 50 ppm, or shipped off site if equal to or greater than 50 ppm PCBs. The predefined horizontal limit in the active portion of the North Yard will be the 100 ppm isoconcentration line based on surface soil sampling, and the vertical limit of excavation within this line is 25 ppm PCBs. Once the remedial excavation is complete and the excavated areas backfilled with clean material, all areas containing soils with PCB concentrations at 10 ppm or greater will be capped with a multilayer asphaltic cap.

b. **QUESTION/COMMENT:** There is a fundamental problem with sending contaminated soils off-site for disposal in another location. Moving contaminated material to another location is not good management of hazardous waste. I am not against saving money for RMC, however there is a net loss to the environment (i.e. greater monetary savings to RMC vs. less overall environmental protectiveness) under this proposal.

**DEPARTMENT'S RESPONSE:** The NYSDEC believes that since there will be no significant increase in risk to either the public or the environment, RMC's request to essentially save $9.9 million in construction costs and speed up the site-wide remediation time schedule by one (1) full year makes sense from both an environmental standpoint and from an economic standpoint.

c. **QUESTION/COMMENT:** Regarding the North Yard and the proposed design change; there has not been enough soils sampling to adequately characterize the horizontal extent of PCB contamination and thus ensure the horizontal excavation limits are correct.

**DEPARTMENT'S RESPONSE:** Under their own initiative, RMC submitted to the NYSDEC for approval an extensive soils sampling plan to characterize both the horizontal and vertical extent of PCB contamination in the North Yard. Because the sampling event will be a "one-time" effort, the plan requires soil borings to be performed every twenty-five (25) feet to the depth needed to document the vertical extent of contamination. This sampling plan is by far the most extensive soils sampling effort performed to date at the RMC site and, along with the sampling performed during the remedial investigation, will provide the data needed to adequately support the design for the remedial excavation.

3. Mr. Mike Kearn (Public Meeting)

**QUESTION/COMMENT:** Regarding the consolidation of low level contaminated soils in the landfill; when the General Motors plant was built, piers pushed water out of the ground during pier placement. Will contamination in the groundwater at the landfill migrate out of the area when soils are placed on top of the existing area? Will a ditch be dug around the site to contain the groundwater?

**DEPARTMENT'S RESPONSE:** During consolidation of materials on top of the existing landfill, the volume of leachate and groundwater which will be "squeezed" out of the existing waste mass will be expected to increase slightly for a brief period of time then reduce in the long term. The leachate and contaminated groundwater underneath the landfill will be captured by the leachate collection system which is currently being installed. Instead of a ditch to collect the groundwater, the leachate collection system consists of a trench filled will porus gravel and a perforated pipe. The gravel filled trench and the perforated pipe allow groundwater and leachate to flow into a pump station where it is pumped to RMC's on-site water treatment plant. When the cap is installed in 1996, the low permeability cover soils and geomembrane will be "keyed in" to the natural clay layer existing at the site. By extending the cap down into the clay layer, a "cut-off or barrier" wall will be formed which will assist in collecting leachate and contaminated groundwater thus preventing them from migrating into the adjacent wetlands.

4. Ms. Luke Daily, League of Women Voters (Public Meeting)

**QUESTION/COMMENT:** Regarding the North Yard design change; since the North Yard is the hub of shipping/receiving for RMC's operations, there is a large amount of activity in this area of the plant. What controls will there be to prevent contamination migrating from this area on truck tires, trains, equipment, etc?

**DEPARTMENT'S RESPONSE:** Before any work related to hazardous waste remediation is begun, work plans are submitted, for NYSDEC approval, detailing among other things, health and safety requirements and emergency contingency plans.

Standard operating procedures and engineering controls are described which typically involve setting up work exclusion zones, personal protection requirements, air monitoring, personnel and equipment decontamination procedures, and contingency plans in case of an emergency. The Department reviews these plans to ensure issues such as contaminant migration, worker safety, and the safety of the public health and the environment are satisfactorily addressed. Only after these plans are approved, and adequate health and safety safeguards are implemented in the field, can remediation work commence. On-going work is inspected continuously in the field to ensure the procedures approved in the work plans are being carried out as intended.

5. Mr. Frank Alguire, Executive Director, Massena Industrial Development Corporation, in a letter dated May 17, 1995

**QUESTION/COMMENT:** The Massena Industrial Development Corporation strongly supports RMC's proposed Request for Modification of Record of Decision. We believe that a savings in time and money for RMC that results in no significant change in risk makes good, simple sense. We understand the complexity of the issues, and applaud your positive consideration of RMC's request.

**DEPARTMENT'S RESPONSE:** No response.

6. Mr. Douglas C. Premo, Project Coordinator, General Motors Powertrain- Massena Plant, in a letter dated May 31, 1995

**QUESTION/COMMENT:**

a. General Motors (GM) supports the ROD Amendment associated with the on-site relocation of select PCB-containing soils and capping in accordance with state and federal requirements for hazardous waste. GM agrees with the NYSDEC and RMC that these materials can be effectively contained rather than be subject to treatment requirements.

b. GM agrees with the NYSDEC and RMC that secure land disposal for PCBs in soil provides equivalent protectiveness in comparison with treatment technologies for such material. Economics and other factors should also be evaluated as decision making criteria.

c. GM agrees with the NYSDEC and RMC that the proposed modifications are justified based on the significant cost saving opportunities while providing equivalent protection of human health and the environment.

**DEPARTMENT'S RESPONSE:** No response.