

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Akzo Nobel Wood Coatings
PROPOSAL NAME: Akzo Nobel Wood Coatings
CLASS OF DEVELOPMENT: One
TYPE OF DEVELOPMENT: Manufacturing and industrial plants
CLIENT FILE NO.: 5517.00

OVERVIEW:

On March 23, 2011, the Department received a Proposal from ORTECH Environmental on behalf of Akzo Nobel Wood Coatings, pursuant to *The Environment Act* for the operation of the existing Akzo Nobel Wood Coatings facility located at 1450 Willson Place in Winnipeg, Manitoba. Operations of the facility involve primarily the mixing of materials to produce surface coatings. Potential air emissions associated with the operations of this facility include volatile organic compounds (VOCs) and particulate matter (PM). The facility operates 12 hours per day and five days per week for 50 weeks per year.

On April 26, 2011, Manitoba Conservation placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Millennium Public Library, and the Manitoba Eco-Network. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members. The Department placed public notifications of the Proposal in the Winnipeg Free Press on Saturday April 30, 2011.

On June 3 and June 17, 2011, Manitoba Conservation forwarded requests for additional information from the TAC to the proponent's consultant. On August 25 and September 29, 2011, Manitoba Conservation received comments/responses on TAC comments from the proponent.

On August 26 and October 4, 2011, the consultant's responses were distributed to the participating TAC for review and comment.

COMMENTS FROM THE PUBLIC:

No comments were received from the public.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Infrastructure and Transportation

- *No concerns*

Manitoba Conservation - Sustainable Resource & Policy Management Branch & Land Branch

- *No concerns*

Manitoba Conservation – Parks and Natural Areas Branch

- *No concerns*

Manitoba Conservation – Wildlife and Ecosystem Protection Areas

- *No concerns*

Manitoba Water Stewardship – Planning and Coordination Branch

- *No concerns*

Manitoba Water Stewardship

May 30, 2011

- *Manitoba Water Stewardship does not object to this proposal, at this time.*
- *The Manitoba Department of Water Stewardship is mandated to ensure the sustainable development of Manitoba's water resources. Manitoba Water Stewardship is committed to the goals of: protecting aquatic ecosystem health; ensuring drinking water is safe and clean for human health; managing water-related risks for human security; and stewarding the societal and economic values of our waterways, lakes and wetlands; for the best water for all life and lasting prosperity. Manitoba Water Stewardship achieves these goals, in part, through administering legislation, including The Water Protection Act, The Water Rights Act, and The Water Power Act.*

Manitoba Conservation – Pollution Prevention Branch

May 30, 2011

- *The submitted results of the air quality dispersion model indicated compliance when referenced to the current Ontario Point of Impingement Guidelines and Ambient Air Quality Criteria (February 2008).*
- *With reference to Attachment C of the submitted proposal, the AERMOD model was run with the assumption that sources at the facility operate continuously for 24-hours*

per day. However, in the sample calculation for Methyl Benzene to determine its 1-hour maximum emission rate (Attachment B, Air Emission Estimates), the time period used is 20 days per month and 12 hours per day. The resulting emission rate from the sample calculation (methyl benzene) was included in Table B-1: Maximum 1-hour VOC emissions. Were the values in Table B-1 adjusted to the 24-hour operating period assumed in the model? If not, this may have a significant impact on the predicted concentrations specifically for Butyl Acetate which are already at 60% and 80% of the air quality criteria value on the “north school field” and “near property area” locations (Table C-4: Modeling Results) respectively.

- *Were background ambient levels taken into consideration in the modelling exercise? This may have an impact for butyl acetate considering the predicted concentration value as discussed in the previous bullet.*

Proponent Response (September 29, 2011):

- With regard to the 24-hour concentrations predicted by the model, the input was based on the facility operating continuously for the 24-hour period. Since the concentrations were all below the criteria, and the criteria are set with ample safety factors, no refinement was done to address the actual operating period. The facility operates for up to 12 hours during the day and dispersion during the day is generally better than at night. As a consequence, the maximum butyl acetate concentrations based on the actual operating hours would be expected to be less than the concentrations shown in Table C-4.
- ORTECH has been unable to identify relevant ambient concentrations of butyl acetate; it is not a target compound for the Canadian National Air Pollution Surveillance program nor the US EPA Toxic Air Pollutant program (in fact in 1999 it was removed from the US EPA VOC definition). We have identified some recent 2009 monitoring in Clarkson, Ontario which indicates a half-hour average for butyl acetate, one of 190 compounds measured, of 13.4 µg/m³ with a standard deviation of 26.4 µg/m³.

Disposition:

After receiving additional information from the consultant, the concerns are satisfied and the Pollution Prevention Branch has no further concerns.

Manitoba Conservation – Environmental Operations

June 17, 2011

- *The proposal does not mention whether or not this process is automated or whether there is significant handling of the product throughout production. This directly affects indoor air quality as well as emissions released from the building. Are there any air pollution control devices on any of the equipment or the ventilation system to treat/minimize odours? Are there any filters on the ventilation system?*

- *The proposal mentions that solid, liquid, and hazardous wastes are stored in containers in the warehouse and sent to an appropriate licensed facility for disposal. Is the storage of wastes separate from the storage of other dangerous goods or other products? Is there an appropriate area for the storage and handling of volatile flammable liquids used in the process and is this area properly grounded and bonded?*
- *Given the size and nature of the facility, I would assume that vehicles or forklifts are used to transport stuff on-site. Is any of this equipment serviced on-site?*
- *What spill control measures are currently in place? What training and resources are available to the staff for the control and management of spills?*
- *Considering the fact that this facility is operating in close proximity to a school and residential area, would it not be possible to conduct actual air quality monitoring in the vicinity to confirm the assumptions made in the dispersion modelling?*

Proponent Response (August 25, 2011)

- Individual materials are manually added to the mixing vessels but the mixing is automated. The primary control of both volatile and solid materials is achieved through standard operating procedures, training and supervision. Akzo Nobel are anxious to minimize any losses as these can affect personnel exposure and affect the amount and quality of the product. Air pollution control systems are not considered justified based on the very small losses during controlled handling.
- Yes, all waste materials are stored separately from raw materials and products. The site handles flammable and combustible and has a rigorous bonding and grounding program. Steps are in place to minimize the generation of static energy during the transfer and manufacturing processes and to dissipate the charge through bonding and grounding. Continuity checks are done periodically to ensure that the charges are dissipated to earth.
- Yes, forklifts are used on site for the movement of goods. These forklifts are serviced on site by qualified contractors for repairs and preventative maintenance.
- The site has a spill control program in place. There's physical containment provided at the site in the manufacturing area. The site has trained its employees in spill control and provides spill equipment.
- Air emissions from coatings preparation are strictly incidental and relatively minor and, as demonstrated in the report, are expected to be at a fraction of the any effects level even under the worst dispersion conditions. In addition, this facility has operated for many years without complaints or incidents. As a consequence, we see no need for expensive testing or monitoring.

Disposition:

No further comments were received from Environmental Operations.

COMMENTS FROM FEDERAL REPRESENTATION:

Canadian Environmental Assessment Agency (CEEA)

May 31, 2011

- *Project information was shared with the Department of Fisheries and Oceans (DFO), Health Canada (HC) and Environment Canada (EC) as part of the federal coordination process.*
- *Based on the responses to the survey the application of the Canadian Environmental Assessment Act (the Act) by a federal authority will not be required for this project.*
- *HC has indicated it possesses expert knowledge related to its mandate, which could be provided to a Responsible Authority if requested.*
- *EC has reviewed the project information and indicated it can contribute its expertise to a responsible authority if a formal request for information is made.*

PUBLIC HEARING:

A public hearing is not recommended because no comments were received from the public.

RECOMMENDATION:

The Proponent should be issued a Licence for the operation of the existing facility in accordance with the specifications, limits, terms and conditions of the attached draft Licence. The responsibility for enforcement of the Licence should be assigned to the Environmental Operations Branch of Manitoba Conservation.

A draft Environment Act Licence is attached for the Director's consideration.

PREPARED BY:

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December 8, 2011, 2011

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