Chicago Area Waterways Chlorides Initiative

IEPA Presentation

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**Current Ambient Conditions of All Segments to be Covered by the Variance Petition**

* Analysis of winter months water quality data of all CAWS segments
* Each entity must ensure that they have sufficient data
	+ - MWRD data
		- Agency data
		- Discharger data
		- USGS data
* Each entity must demonstrate compliance cannot be immediately reach in the receiving stream and discharge
* Develop a monitoring plan for each waterbody/watershed
* Annual Report documenting water quality progress made in each waterbody/watershed

**Description of Facility Operations**

For a good discussion on the following elements, please see PCB2009-125, Sanitary District of Decatur v. Illinois EPA, pp 6-13

* Discussion on each entity seeking variance
	+ Number of persons employed
	+ Age of facility
	+ Location of the facility
		- Map
	+ Area affected by the facility’s activity
		- Location of discharge points and receiving waterbody
	+ Identify all environmental permits held
* Include existing permits and pending permit applications
	+ Nature and amount of chloride used in the process or activity
		- Estimate loadings (tons/year and/or lbs/year? – think about how we want to measure progress 5 or 10 years?)
			* loading from individual sources at the site,
			* total loading
		- Discussion of chloride loadings contributed by all sources into receiving streams under different weather conditions, operational settings
		- Describe process in which chloride is used
* Identity and quantify chloride waste streams and sources within the plant
	+ - * + Pretreatment
				+ CSO
				+ Industrial sources, etc.
			* Describe plant activity
			* Identify and quantify chloride waste stream and sources on the plant property
				+ Storage
				+ Application
				+ Storm water runoff
	+ Describe chloride controls and BMPs already in use
		- Include those within the plant and on the property

**Alternatives and BMP Discussion**

For a good discussion on the following elements, please see PCB2009-125, Sanitary District of Decatur v. Illinois EPA, pp. 13 -32

* + - * Discussion of alternatives and BMPs should be based on engineering and literature search
* None of the alternatives and BMPs would result in attaining the chloride water quality standard
	+ - * Discussion of alternatives and BMPs for wastestreams necessary to achieve compliance with chloride WQS
	+ Within the plant
	+ The plant property
	+ offsite
* Availability of alternatives/BMPs, extent the alternatives/BMPs were studied and factors leading to the selection of alternatives/BMPs = technology, BMPs, alternative materials, etc.
	+ Alternatives/BMPs, associated cost for each of Alternatives/BMPs
	+ Availability of alternatives
	+ Pros and cons
* Complete documentation
* Discussion to indicate or demonstrate why immediate compliance would pose an unreasonable hardship
	+ Technology, BMPs, alternative materials, and associated costs of all three
* Consider case law on what constitutes arbitrary and unreasonable hardship
	+ - * Citations as well as documentation must be provided to the Board
			* Alternatives/BMPs- based on literature and engineering search
			* Associated Costs
* Annual report documenting whether and to what extent cost-effective and reasonable BMPs have been implemented
* Annual report documenting availability of alternative treatments or any changes to facility’s NPDES treatment technologies

**Description, With Supporting Information from the Scientific Literature, of the Environmental Impacts Associated with the Remedial Alternatives and Analysis of What Could be Done In an Environmentally Safe Manner**

For a good discussion on the following elements, please see PCB2009-125, Sanitary District of Decatur v. Illinois EPA, pp. 37 – 44

* A detailed description of the compliance plan, including a discussion of the proposed alternatives/BMPs to be undertaken to achieve full compliance with the chloride water quality standard; a time schedule for the implementation of alternatives/BMPs; and estimated costs involved for each phase of the implementation and the total cost to achieve compliance
* Discussion of all that can be done on-site/off-site BMPs, controls onsite, recycle
* Review Canada and Minnesota studies
* One compliance plan for everyone? But specific enough to know who is doing what (tracking also needs to be specific)
* Provide a time schedule for all that can be done on-site/off-site BMPs, controls onsite, recycle. facility specific
* Provide an estimated cost for all that can be done on-site/off-site BMPs, controls onsite, recycle
* Quantify chloride discharges into the receiving stream. Provide discussion on how chloride would impact the aquatic biota and create toxicity effects.
	+ - * A description of the environmental impact of the activity including:
* What is being discharged vs. what would be discharged under immediate compliance with the chloride standard
	+ Data/info showing chloride reduction achievable within the variance timeframe vs. reductions needed to achieve the chloride standard
	+ Impacts of the chloride discharge under (g)(1), if variance is granted vs. compliance with the chloride standard
* Discussion of the measures to be undertaken during the period of the variance to minimize the impact of the discharge on human, plant, and animal life in the affected area, including the numerical interim discharge limitations that can be achieved during the period of the variance;
* Chloride loading caps on NPDES dischargers
* BMPS/controls discussion (within the plant and on the plant property)
* Describe chloride standard and BMPs only in winter months

**Relief Requested**

* + - * Variance Conditions:
* IEPA will assist in drafting the variance conditions?
* Waterbody specific
* 5/10 year
* Terms of variance
* From the effective date of the winter chloride standard
	+ - * Identify including docket number, of any prior variance issued to the petitioner and if known, the petitioner’s predecessors, concerning similar relief

**Social/Economic Impacts Associated with Reducing/Eliminating Chloride as Deicing Agent**

* + - * Discussion of how significant chloride controls would result in substantial and widespread economic and social impact
* Social impact analysis
* Economic impact analysis (general discussion)
* Documentation supporting above analyses

**Reporting/Documentation Requirements for Renewal**

* + - * Satisfactory progress is required for extension of variance:

* Must file as a new petition,
* Annual report documenting the steps taken to meet the requirement of the previous variance (it will not be renewed if the applicant did not comply with the conditions of the original variance),
* All participants need to provide a discussion that their receiving waterbody is not achieving the water quality standard,
* Participants shall consider filing a motion to incorporate the prior record.