

ADDENDUM TO THE FACT SHEET
FOR NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM (NPDES)
PERMIT NO. WA 0037419
September 2009

I. GENERAL INFORMATION

Facility: Birds Eye Foods
3303 South 35th Street
Tacoma, Washington 98409

II. APPLICATION REVIEW

Birds Eye Foods submitted an application to the Department of Ecology (Ecology) on September 14, 2007, for permit reissuance, and Ecology accepted it on February 27, 2008. Operations at Birds Eye Foods include production of canned food products, bottled salad dressing and canned chip dips. The facility discharges non-contact cooling water without additives. Ecology has reviewed the application, discharge monitoring reports, and other facility information in enough detail to ensure that:

- Birds Eye Foods has complied with all of the terms, conditions, requirements and schedules of compliance of the expired permit.
- Ecology has up-to date information on the Birds Eye Foods waste treatment practices, the facility's production levels; and the nature, content, volume, and frequency of its discharge.
- The discharge meets applicable effluent standards and limits, water quality standards except for copper, and other legally applicable requirements.

The previous permit does not have a copper effluent limit; however based on information provided in the application, discharge monitoring reports and receiving water study report Ecology must establish a copper limit to protect the receiving water quality. The accompanying permit establishes an interim and final copper limit.

Federal and state regulations require that effluent limits in an NPDES permit must be either technology or water quality-based.

- Technology-based limits are based upon the treatment methods available to treat specific pollutants. Technology-based limits are set by the EPA and published as a regulation, or Ecology develops the limit on a case-by-case basis (40 CFR 125.3, and chapter 173-220 WAC).
- Water quality-based limits are calculated so that the effluent will comply with the Surface Water Quality Standards (chapter 173-201A WAC), Ground Water Standards (chapter 173-200 WAC), Sediment Quality Standards (chapter 173-204 WAC) or the National Toxics Rule (40 CFR 131.36).

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- Ecology must apply the most stringent of these limits to each parameter of concern. These limits for copper are described below.

Ecology calculated the copper effluent limit based on the facility performance since July 2004, to assure no further degradation of the receiving water quality. The *tsdcalcAug08.xlsm* spreadsheet was used, which is available at the Ecology website. Calculations and data are shown in Appendix B. Ecology determined a copper maximum daily effluent limit of 30 micrograms per liter ($\mu\text{g/L}$) by rounding up 26 $\mu\text{g/L}$ (the spreadsheet result) to one significant digit because data used for the calculations contained numbers with one significant digit. The performance based limit will serve as an interim copper effluent limit. Based on the best professional judgment (BPJ), Ecology considers the performance-based limit to be equivalent to the technology-based limit at this time.

Ecology also calculated water quality-based effluent limit for copper, 6 $\mu\text{g/L}$ (Appendix B). No dilution was available because an ambient copper concentration of 5 $\mu\text{g/L}$ was equal to or higher than the marine water quality criteria, 4.80 $\mu\text{g/L}$ (acute) and 3.10 $\mu\text{g/L}$ (chronic). Ecology calculated an ambient copper concentration using data obtained during the Birds Eye Foods receiving water study. The water quality-based effluent limit is more stringent than the performance-based limit; however, Birds Eye Foods is unable to comply with the limit at this time. Therefore, the proposed permit includes the performance-based limit for copper as an interim limit and the water quality-based effluent limit as a final limit. Birds Eye Foods must comply with the final copper effluent limit by June 30, 2014. Ecology proposes the following compliance schedule:

Activity	Report due date
Preliminary investigation of alternatives, negotiations, and alternative selection.	Progress report by June 30, 2010.
Study of the selected alternative.	Progress report by June 30, 2011.
Engineering report.	Engineering report by January 30, 2012.
Operation and maintenance (O&M) manual.	O&M manual by June 30, 2012.
Construction completed.	Progress report by June 30, 2013.
Comply with the final copper effluent limit.	Progress report by June 30, 2014.

III. PERMIT REAUTHORIZATION

When Ecology reauthorizes a discharge permit it essentially reissues the permit with the existing limits, terms and conditions. In this case Ecology makes some minor changes to the permit. Alternatively, when Ecology renews a permit it re-evaluates the impact of the discharge on the receiving water which may lead to changes in the limits, terms and conditions of the permit.

This fact sheet addendum accompanies the permit, which Ecology proposes to reauthorize for the discharge of wastewater to the Thea Foss Waterway. The previous fact sheet explains the basis for the discharge limitations and conditions of the reauthorized permit and remains as part of the administrative record.

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Ecology determined it does not need to change the existing permit requirements (except for the compliance schedule), including discharge limits (except for copper) and monitoring, to protect the receiving water quality. The previous fact sheet addressed conditions and issues at the facility at the time when Ecology issued the previous permit in 2004. Since the issuance of the current permit, Ecology has not received any additional information which indicates that environmental impacts from the discharge warrant a complete renewal of the permit. The reauthorized permit is virtually identical to the previous permit issued on May 11, 2004, except of minor changes mentioned in this section.

Ecology reviewed inspections and assessed compliance of the facility's discharge with the terms and conditions in the previous permit and determined that it should not rank the facility as a high priority for permit renewal. Ecology assigns a high priority for permit renewals in situations where water quality would benefit from a more stringent permit during the next five-year cycle.

The permit reauthorization process, along with the renewal of high priority permits, allows Ecology to reissue permits in a timely manner and minimize the number of active permits that have passed their expiration dates. For permit reissuance planning purposes, Ecology follows a system of ranking that considers the benefit gained by renewing a permit rather than reauthorizing a permit during its annual permit planning process. Ecology assesses each permit that is expiring and due for reissuance and compares it with other permits due for reissuance. Ecology notifies the public and seeks input after it has tentatively established the initial draft ranking of the permits it plans to renew and those it plans to reauthorize. Ecology considers all relevant comments and suggestions before it makes a final decision.

Ecology carried over the discharge limits and conditions in effect at the time of expiration of the previous permit to this reauthorized permit. Ecology only changed the submittal dates for reports from those in the previous permit. Ecology removed the completed report requirements that do not require additional or continued assessment. It adjusted the dates for the other standard compliance and submittal requirements that it carried over from the past permit into this reauthorized permit. Ecology considered these reports necessary in the previous permit and no information has come forward to cause it to reconsider.

Ecology also included a new Appendix A in the reauthorized permit which provides testing methods, detection limits, and method reporting limits that are required for testing as part of the permit renewal application and for routine permit compliance monitoring. Special Condition S2. has been revised to require conformance with the specifications provided in the new Appendix A table.

The following is a summary of all permit changes other than noted above:

- Addition of the interim and final copper effluent limits.
- Addition of the compliance schedule to meet the final copper effluent limit.
- Addition of an Appendix A—Effluent Characterization for Pollutants.
- Removal of the Receiving Water Study section since the study has been already completed.

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Ecology must public notice the availability of the draft reauthorized permit at least 30 days before it reissues the permit [Washington Administrative Code (WAC) 173-220-050]. Ecology invites you to review and comment on its decision to reauthorize the permit (see Appendix A-Public Involvement for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will prepare a response to comments document that it will attach to this fact sheet addendum. The response to comments will include the resultant changes to the permit and either address each comment individually or summarize the substantive comments and respond. Ecology sends a copy of the response to comments to all parties who submitted comments. Ecology will include the response to comments in this fact sheet addendum.

IV. RECOMMENDATION FOR PERMIT ISSUANCE

Ecology proposes to reissue this permit for five years.

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to reissue a permit to Birds Eye Foods. The permit includes wastewater discharge limits and other conditions. This fact sheet addendum describes the facility and Ecology's reasons for reauthorizing the permit conditions.

Ecology placed a Public Notice of Application on June 9, 2008, and June 16, 2008, in *Tacoma News Tribune* to inform the public about the submitted application and to invite comment on the reissuance of this permit.

Ecology will place a Public Notice of Draft on July 31, 2009, in *Tacoma News Tribune* to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System permit and fact sheet addendum.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website.).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed NPDES Permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone, 360-407-6289, or by writing to the permit writer at the address listed below.

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

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APPENDIX A—Calculations and Data

Performance-based effluent limit for copper.

PERFORMANCE-BASED EFFLUENT LIMITS						
USE EXCEL TO PERFORM THE LOGNORMAL TRANSFORMATION						
AND CALCULATE THE TRANSFORMED MEAN AND VARIANCE						
					LOGNORMAL TRANSFORMED MEAN =	1.8759
					LOGNORMAL TRANSFORMED VARIANCE =	0.3593
					NUMBER OF SAMPLES/MONTH FOR COMPLIANCE MONITORING =	0.33
					AUTOCORRELATION FACTOR(ne)(USE 0 IF UNKNOWN) =	0
					E(X) =	7.8109
					V(X) =	26.376
					VARn	0.8373
					MEANn=	1.6369
					VAR(Xn)=	79.928
					MAXIMUM DAILY EFFLUENT LIMIT =	26.314
					AVERAGE MONTHLY EFFLUENT LIMIT =	23.153
					23.15251 22.517589	
					Cu data used	
					for	
					calculations	
	Date	Cu (µg/L)				ln(Cu)
	1-Jul-04	13.9			13.9	2.631889
	1-Oct-04	<20			10	2.302585
	1-Jan-05	<10			5	1.609438
	1-Apr-05	<20			10	2.302585
	1-Jul-05	<2.5			1.25	0.223144
	1-Oct-05	6.8			6.8	1.916923
	1-Jan-06	<10			5	1.609438
	1-Apr-06	<10			5	1.609438
	1-Jul-06	<10			5	1.609438
	1-Oct-06	<10			5	1.609438
	1-Jan-07	<10			5	1.609438
	1-Apr-07	<20			10	2.302585
	1-Jul-07	<20			10	2.302585
	1-Oct-07	<20			10	2.302585
	1-Jan-08	<20			10	2.302585
	1-Apr-08	<20			10	2.302585
	1-Jul-08	<5			2.5	0.916291
	1-Oct-08	<20			10	2.302585

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Water quality-based effluent limit for copper.

Dilution (Dil'n) factor is the inverse of the percent effluent concentration at the edge of the acute or chronic mixing zone.									
Permit Limit Calculation Summary									
	Acute Dil'n Factor	Chronic Dil'n Factor	Metal Criteria Translat or	Metal Criteria Translat or	Ambient Concentration	Water Quality Standard Acute	Water Quality Standard Chronic	Average Monthly Limit (AML)	Maximum Daily Limit (MDL)
PARAMETER			Acute	Chronic	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	1.0	1.00	0.83	0.83	5.4470	4.8000	3.1000	5.3	5.8

Where ambient concentration is $5.447 = (3.25 * 24.2 * 6.75 * 4.1 * 3 * 4)^{(1/6)}$ —data provided in the receiving water study report.

Waste Load Allocation (WLA) and Long Term Average (LTA) Calculations							Statistical variables for permit limit calculation				
WLA Acute	WLA Chronic	LTA Acute	LTA Chronic	LTA Coeff. Var. (CV)	LTA Prob'y Basis	Limiting LTA	Coeff. Var. (CV)	AML Prob'y Basis	MDL Prob'y Basis	# of Samples per Month	
ug/L	ug/L	ug/L	ug/L	decimal	decimal	ug/L	decimal	decimal	decimal	n	
4.8	3.10	1.5	1.6	0.60	0.99	1.5	0.60	0.95	0.99	0.33	0.83