City of North Las Vegas

Industrial Pretreatment Funding Plan

December 29, 2015
Revised May 23, 2016
Revised July 12, 2016

CITY OF
NORTH LAS VEGAS
Your Community of Choice

I. Introduction

The City of North Las Vegas is required to implement and maintain an Industrial Pretreatment Program in accordance with 40 CFR Part 403. The intent of the program is to:

1. To prevent the introduction of pollutants into publicly-owned treatment works(POTW) which will interfere with the operation of a POTW, including interference with its use or disposal of municipal sludge
2. To prevent the introduction of pollutants into POTWs which will pass through the treatment works or otherwise be incompatible with such works
3. To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

On June 26, 2015, the City of North Las Vegas was issued an Administrative Order by EPA. The Order requires, in part, that "by January 1, 2016, the City shall submit a funding plan that shows adequate funding to support the program. The plan shall include an organization chart, estimated cost of the program, cost recovery method, funding levels and staffing to implement the program."

In order to comply with the Administrative Order, the following areas will be addressed:

- Organization and Staffing
- Necessary equipment to fulfill administration and field activities
- Funding Levels
- Cost Recovery Methods

II. Organization and Staffing

The City's Industrial Pretreatment Program (IPP) is managed through the Utilities Department. Staffing for the program was transferred from the Utility Operations Building to the Wastewater Reclamation Facility (WRF) in September 2014 to more closely reflect the integration of the City's POTW with industrial dischargers. Responsibility for the program was assigned to a WRF Operations Supervisor to insure coordination between the WRF and industrial users. The Director of Utilities is responsible for overseeing the IPP and reports directly to the City Manager. The City Manager reports to Mayor and City Council, who approves budgets, pretreatment ordinances and other enforceable implementation policies.

IPP staff consists of 0.5 FTE WRF Operations Supervisor, 1 Senior Pretreatment Inspector, 2 Pretreatment Inspector I's and 0.5 FTE Environmental Technician. Administrative Support is provided by a Senior Office Assistant located at the WRF. Prior to September 2014, the IPP was managed and implemented by the Utilities Operations Division and consisted of 1 Pretreatment Supervisor and 1 Senior Pretreatment Inspector and 6 Pretreatment Inspectors. Prior to September 2014, the scope of the pretreatment staff included cleaning and TV inspecting sanitary sewers and cleaning drainage inlets and laterals. Upon evaluation of the program at that time, it was determined that the IPP Program would be more efficient if operation and management of the program was transferred to the Water Reclamation Facility to better integrate the operations of the POTW with oversight of industrial users discharges. This transfer involved moving 1 Senior Pretreatment Inspector and 2 Pretreatment Inspectors to the WRF to manage the program exclusively. The other 4 Pretreatment Inspector classifications were changed to Environmental Technicians remaine in the Utilities Operations Division and are dedicated to sanitary sewer cleaning and TV inspection and drainage inlet and lateral cleaning as a condition of the City's MS-4 Permit. A fifth Environmental Technician is being hired to serve as a

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fill in for vacation and sick leave. It is expected that half of his time (0.5 FTE) will be used for FOG and grease trap inspections.

Figure I show the current IPP organization and Table I summarize the scope of the City's IPP.

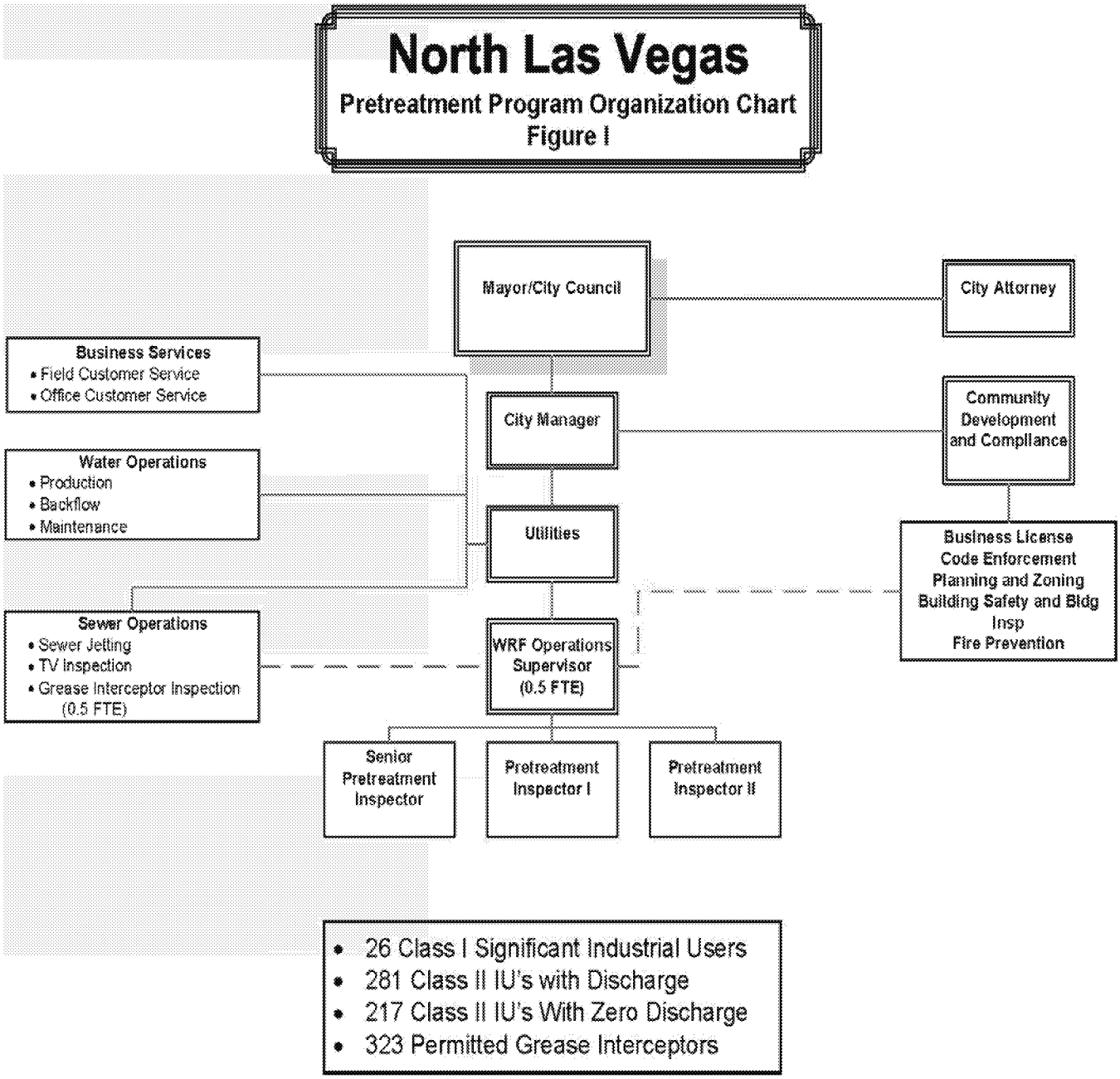

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Table 1
Scope of the City's Industrial Pretreatment Plan

Item	Number	Comments/Controls
Class I Significant Industrial Users (SIU) Permits	26	Permits Issued. This number may drop to 22 if the Interlocal Agreement with Clark County is completed. 5 year permit issued; Inspected and sampled minimum two times per year
Class II Industrial User Permits with Discharge	281	5 year Permit; Inspected and sampled on a random basis
Class II Industrial User Permits with Zero Discharge	217	5 year Permit; Inspected and sampled on a random basis. No industrial waste being discharged into sanitary system
Grease Interceptor Permits	323	Endeavor to inspect on a periodic basis. No specific time set.
Categorical Industrial User (CIU)	I	Included as one of the 27 SIU's
Permitted Zero-discharging CIUs:	I	Included as one of the 27 SIU's. Not allowed to discharge to POTW
Permitted Zero-Discharging Non-Categorical SIUs:	0	Included as one of the 27 SIU's. Not allowed to discharge to POTW
SIU's Permitted by NLV discharging to another jurisdiction's POTW	6	Included as part of the 27 SIU's. Discharge to Clark County. New Interlocal contract is being negotiated. 2 additional SIU's permitted directly by Clark County.
SIU's Permitted by NLV discharging from another jurisdiction to NLV's POTW	0	City is further evaluating industries located in Las Vegas and that may be discharging to the North Las Vegas collection system.
Other Industrial Users anticipated to be regulated:	TBD	
# of Waste Haulers that are controlled through permit, BMPs, Ordinance:	0	How controlled: The City currently does not accept trucked and hauled waste. A new discharger that collects and process food-based fats, oils and grease is proposing to bring approximately 70,000 gallons per week to the treatment works in 2016.
# of Silver Generating Facilities that are controlled through permit, BMPs, Ordinance (photo, x-ray, etc.)	49	Controlled through Issuance of Class II permits.
# of facilities regulated for sand/oil interceptors	184	Controlled through Issuance of Class II Permits.
From Class II printout: Monitoring designation	26	Controlled through Issuance of Class II Permits.
# of Dental Facilities that are controlled through permit, BMPs, Ordinance:	15	Controlled through Issuance of Class II Permits, not for amalgam separator

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Personnel Responsibilities

WRF Operations Supervisor (0.5 FTE)

- Manages the day-to-day pretreatment program activities, including keeping management informed of pretreatment program activities.
- Identifies and quantifies needed resources including equipment and staff through annual budgeting process.
- Coordinates needed changes to legal authority, local limits, SOPs, and boilerplates to ensure that the program remains current and enforceable.
- Holds periodic meetings with other jurisdictions to assure that implementation and enforcement activities are effective and Interlocal Contracts up-to date.
- Prepares the Pretreatment Annual Report that goes EPA.
- Develops and implements new local sector control programs for non-domestic users, where problems are identified or controls needed (e.g. FOG, dental, etc.).
- Represents the POTW pretreatment program during audits and PCIs conducted by EPA.
- Manages staff activities.
- Ensures that administrative procedures are in-place (e.g. submittals received are date stamped, permit and administrative files are organized and kept up-to-date, records management procedures for archiving of records, etc.).
- Coordinates and ensures that the industrial waste survey (IWS) is kept up-to-date and procedures are in-place to identify new users.
- Ensures that all POTW influent/effluent and other pretreatment sampling required by the POTW's NPDES permit is completed and identifies any pollutants of concern from the monitoring for further evaluation.
- Evaluate POTW pollutant loading to ensure that current local limits are adequate and identifies any pollutants that are entering the POTW in excess of approved MAHLs.
- Ensures that the IU permits do not over allocate the MAIL.
- Establishes and maintains procedures for tracking milestones, deadlines, re-sampling and compliance schedules.
- Ensures that appropriate analytical methods are used and that new monitoring requirements are implemented (e.g. Method 1631 and clean sampling for pollutants).
- Review technical information to ensure proposed pretreatment devices are of adequate size and/or design (interceptors and/or treatment systems) for the type of waste to be treated and to ensure all sampling points are accessible.
- Makes sure permit applications to new/reapplying IUs are sent out and reviews returned application to ensure that the application is complete and accurate.
- Reviews and drafts SIU permits as needed, consistent with legal authority and applicable Categorical Standards.
- Establishes and maintains procedures for verifying lab data.
- Sets inspection schedules for staff and makes sure all inspections are completed as required.
- Reviews all inspection reports for appropriate required actions and follow-up and makes sure reports are sent to the IU in a timely manner.
- Ensure that annual POTW compliance monitoring at SIUs is completed, including chain-of-custodies.
- Assigns staff to review and follow-up on all self-monitoring reports that are submitted by industrial users.

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- Periodically reviews IU reports, records, sampling and other information with staff to make sure the data is of sufficient quality to be used in an enforcement action initiated by the POTW.
- Initiates timely and appropriate enforcement actions for IU violations.
- Develop annual pretreatment training plan for self and staff and obtain resources.
- Establish formal communications and SOPs with sewer maintenance and POTW staff to identify potential issues due to non-domestic discharges.
- Work with staff to provide appropriate technical assistance to industrial users and other businesses on the requirements of the pretreatment program (e.g. newsletters, memos, guidance, etc.).
- Look for opportunities to make presentations to local groups about the pretreatment program and requirements (business groups, development groups).
- Look for opportunities to contribute to student education by speaking at schools and presenting during POTW tours.

Senior Pretreatment Inspector (1 FTE)

- Performs and coordinates technical work involving the evaluation of industrial and commercial users served by the City for inclusion in the Pretreatment Program
- Reviews all plans submitted to PAC center for pretreatment requirements
- Insures Industrial Waste Surveys are submitted for new development
- Identifies existing or potential industrial users through wastewater surveys, visual observations and Development Task Force meetings
- Initiates permitting process
- Establish contact with commercial and industrial users and explains wastewater discharge regulations
- Schedules facility inspections
- Collects samples, analyze results and prepares report of findings
- Develops and maintains detailed records and logs on businesses and industrial users and prepares comprehensive reports of results
- Prepares wastewater contribution permits and writes enforcement actions
- Responds to inquiries from other departments, agencies, businesses and the general public regarding pollution control and pretreatment code requirements
- Responds to complaints from citizens and other government agencies
- Investigates complaints, prepares reports and takes required action
- Monitors hazardous waste storage and disposal activities of industrial users
- Monitors waste manifest of permittees
- Performs business license inspections to determine if local, state and federal pretreatment regulations are being met
- Reviews spill control measures and the proper storage of chemicals to ensure the City's wastewater collections system and storm water collection system are protected
- Performs grease facility, Class I and Class II inspections and submits reports to the supervisor

Pretreatment Inspectors I, II (2 FTE)

- Performs grease facility, Class I and Class II inspections and submits reports to the supervisor
- Identifies existing or potential industrial users through wastewater surveys, visual observations and Development Task Force meetings, and initiates permitting process; establishes contact with commercial and industrial users; and explains wastewater discharge regulations.

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- Develops inspection and sampling criteria and protocols for permitted industries; enforces City pretreatment regulations; and establishes sampling guidelines and schedules.
- Inspects facilities, collects samples, analyzes results, and prepares reports of findings.
- Develops and maintains detailed records and logs on businesses and industrial users and prepares comprehensive reports of results.
- Prepares wastewater contribution permits and writes enforcement actions
- Responds to inquiries from other departments, agencies, businesses and the general public regarding pollution control and pretreatment code requirements.
- Responds to complaints from citizens and other government agencies; investigates complaints; prepares reports; takes required action.
- Undertakes special projects and studies as assigned.
- Monitors hazardous waste storage and disposal activities of industrial users.
- Monitors waste manifest of permittees.
- Industrial and commercial building plans and specifications for new construction and major renovation work to ensure adherence to local, state, and federal pretreatment regulations.
- Performs business license inspections to determine if local, state and federal pretreatment regulations are being met; initiates permitting process.
- Reviews spill control measures and the proper storage of chemicals to ensure the City's wastewater collections system and storm water collection system are protected

Environmental Technician (0.5 FTE)

- Fills in for annual leave or sick leave on Sewer Vactor or TV Inspection Truck
- Remaining time (760 hours) perform grease inspections under supervision of the WRF Supervisor

Admin Support

Currently, the WRF Senior Office Assistant is providing admin support for the IPP. Due to the demands of the WRF for admin support, an additional Senior Office Assistant is being considered to support the IPP.

III. Necessary equipment to fulfill administration and field activities

In order to insure staff is able to administer the IPP safely and efficiently, management has provided them with all of the necessary tools needed to perform their jobs. All staff have been properly trained for confined space entry and must possess and maintain barricading certification, Industrial Waste Inspector certification, and IMSA work zoned safety or traffic control certification. Certain staff members have also been trained on the proper handling and operation of wastewater sampling equipment, respiratory equipment and pH monitors and meters. Depending on the activity, safety equipment is shared between the IPP staff and sewer maintenance and inspection staff.

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A summary of equipment available for use by the IPP staff is as follows:

Equipment	Comments
Vehicles	Staff shares pool vehicles with the WRF. There are always adequate vehicles available
Automated Samplers	Staff has 6 new and 6 older units
Portable pH meters	3 available
Portable H2S log meters	6 available
Safety Equipment	
• Gas Monitor for manhole entry	6 available
• Self-Contained Breathing Apparatus	
• Tripod	3 sets available
• Harness	8 harnesses in various size
• Blowers	6 portable blowers
• Manhole lid remover	Available on all vehicles
• Gloves, Leather and vinyl	Mandatory for all IPP staff
• Safety Glasses	Mandatory for all IPP staff
• Hearing Protection	Mandatory for all IPP staff
• ANSI Approved safety shoes	Mandatory for all IPP staff
• Rubber Boots	Mandatory for all IPP staff
• Type 3 Safety Vests	Mandatory for all IPP staff
• Hard Hats	Mandatory for all IPP staff
• Tyvex Overalls	Available when needed to go into a manhole or basin
Office Equipment	
• Computers/Printers	Desktops for all IPP Staff
• Copiers	Available at IPP office
• Recordkeeping Software	Microsoft Excel Spreadsheet; Investigating dedicated pretreatment software
• Recordkeeping File Storage	Dedicated secure room at IPP Office
Cell Phones	Only supervisor has cell phone
Uniforms	Uniforms are issued and are mandatory to be worn
Badges/ID's	ID Badges are issued and mandatory to be worn
Lab Testing	Performed by independent lab

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Staffing Analysis

Breakdown of Time per Major Task

Task	Hours	Comments
Class I Permit Inspections	416	26 SIU's *2/yr* 4 hours/inspection * 2 employees
Class II Discharge Permit Inspections	281	281 Class II permits * 1/yr * 1 hr/inspection
Class II Zero Discharge Permit Inspections	109	109 Class II permits * .5/yr * 1 hr/inspection
Grease Trap Inspections	646	323 Class II permits * 1/yr * 2 hr/inspection
Sampling and monitoring equipment maintenance	72	72 hours to clean and repair field test equipment
Sampling and monitoring Class I sites	450	75 events/yr * 3 hours /event* 2 employees
PAC Center Plan Review	900	18 hrs/wk * 50 weeks
PAC Center Task Force Meetings	100	2 hrs/wk * 50 weeks
Business license Field Inspections	300	300 inspections * 1 hour/ inspection
Administration (NOV, Permitting, recordkeeping, self-monitoring reports	800	800 hours/yr
Training	288	72 hours/yr * 4.0 FTE
Total Estimated Hours/year	**4,362**	

Available Work Hours per Employee

Task	Hours	Comments
Total available work hours per employee	1,872	52 weeks/yr*36 hrs/wk
Total available vacation/Floating hours per employee	(243)	4 weeks (36 hrs) vacation + 11 (9 hrs) paid holidays
Total available sick hours per employee	(108)	12 days sick leave
Total available work hours per employee	**1,521**	
Total work hours for 4.0 FTE	**6,084**	

Based on the above analysis, 4.0 FTE's should be adequate to manage and operate the City's IPP. We are considering adding one Senior Office Assistant to the program to provide clerical and filing support, but have not implemented anything yet.

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IV. Funding Levels

As mentioned previously, prior to the current fiscal year 2015-2016, which began July 1, 2015, the Industrial Pretreatment Program was consolidated with the sewer maintenance and inspection program. A copy of the approved budget for the IPP for FY 15-16 is as follows:

Item	Amount	Comment
Salaries and Wages	$220,746	1 Senior Pretreatment Inspector, 2 Pretreatment Inspectors; *0.5 WRF Operations Supervisor budgeted in WRF Budget* ($34,350);); *0.5 Environmental Technician for grease inspections budgeted in Utilities Operations ($23,638)*
Overtime	$10,000	Off hours random inspections
Benefits	$110,485	PERS, Health Ins., Medicare, Workers Comp; *0.5 WRF Operations Supervisor budgeted in WRF Budget* ($17,492); *0.5 Environmental Technician for grease inspections budgeted in Utilities Operations ($15,192)*
Supplies	$3,000	Miscellaneous
Fuel & Lube	$2,000	
Minor Equip	$10,000	Flow meters, testing equipment
Uniforms	$1,700	
Communications	$2,200	Radios
ISF-Liability	$7,653	Insurance
Membership Dues & Subs	$400	
Postage	$500	Enforcement Actions, Newspaper Publications
Equipment Rental	$1,000	As needed
Equipment Maint & Repair	$4,000	Meters, testing equipment
Professional Fees	$100,000	Consultants, Laboratory Fees
Travel & Education	$2,000	Training
Capital Outlay	$1,000	Not categorized
Total Pretreatment	$480,684	

V. Cost Recovery Methods

Approximately 50 percent of the IPP is funded through permit fees generated for the specific purpose of administering the IPP. The other 50 percent is funded through wastewater rates.

Per Section 13.24 of the CNLV Municipal Code, Permit fees for industrial and commercial users are as follows::

Permit	Number	Monthly Fee	Annual Revenue
Class I Permit	26	$125.00	$39,000
Class II Permit	498	$35.00	$209,160
Grease Interceptor	323	$12.50	$48,450
Total Permit Fees			$296,610

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The balance of the required funding comes from revenues generated through monthly sewer use fees. Sewer use fees are as follows:

Wastewater Rates		
Customer Class		Fees
		1-Oct-15
Monthly Service Fee ($ each bill)		$3.90
Residential and Multifamily	First 3,000 gallons ERU ($/ERU)	$14.19
	Over 3,00 gallons per ERU ($ per 1,000 gallons of water usage*)	$5.17
User Fee, Commercial and Large Commercial, not otherwise defined below ($ per 1,000 gallons of water usage*)		$5.17
User Fee, Restaurant ($ per 1,000 gallons of water usage*)		$7.41
User Fee, Large Commercial Laundry or Dairy ($ per 1,000 gallons of water usage*)		$5.47
User Fee, Large Commercial Bottler		$6.78

Note: The above wastewater rates increase by 3 percent on October 1st of each year. The CNLV collected $38,796,307 in wastewater fees in FY 14-15 and is projecting to collect $40,972,613 in FY 15-16. The Sewer Enterprise Fund has a current balance as of June 30, 2015 of $25,384,556. Consequently, there are adequate funds to fund the City's IPP.

VI. Conclusion

The City's current organization, cost recovery and staffing patter is adequate to in manage and operate the Industrial Pretreatment Program as designed.

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