BEFORE THE NATIONAL GREEN TRIBUNAL (SZ) CHENNAI

OA No. 47 of 2023

Suresh ... Applicant

Versus

1. TNPCB & 5 Ors ... Respondents

VOLUME - A

Dated this the 24th day of April, 2023 at Chennai

Through
A.Yogeshwaran

(1)

ஒப்புதலுடன் கூடிய பதிவு அஞ்சல்

தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம்

அனுப்புதல்	பெறுதல்
பொறியாளர். சா. சிவரஞ்சனி., பி.டெக்., எம்.இ., பொது தகவல் அலுவலர்/ மாவட்டசுற்றுச்சூழல் பொறியாளர் (கூ/பொ), தமிழ்நாடு மாசுகட்டுப்பாடு வாரியம். அதியமான்கோட்டை-ஓசூர் புறவழிச் சாலை, ஏ.ரெட்டிஅள்ளி கிராமம், தருமபுரி வட்டம் (ம) மாவட்டம் - 636 809	திரு. ப. சுரேஷ், த/பெ. பச்சையப்பன், ஒருங்கிணைப்பாளர், பீனியாறு பாதுகாப்பு விவசாய இயக்கம், அலமேலுபுரம் கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம் தருமபுரி மாவட்டம்

கடித எண் : கோ.007639/மா.சு.சூ.பொ/த.பெ.உ.ச./ தருமபுரி/2023 நாள் :09.02.2023

அய்யா,

பொருள் : த.நா.மா.க.வாரியம், மா.சு.சூ.பொ, தருமபுரி – தகவல் பெறும் உரிமை சட்டம்-2005 ன் கீழ் பதில் அளிப்பது - தொடர்பாக.

பார்வை :
1. தங்களின் மனு மாவட்ட ஆட்சியர் அலுவலகம் வாயிலாக இவ்வலுவலகத்தில் பெறப்பட்ட நாள்: 23.01.2023.
2. இவ்வலுவலக கடித எண் : கோ.007639/மா.சு.சூ.பொ/த.பெ.உ.ச./ தருமபுரி/2023 நாள் :30.01.2023
3. தங்களின் வங்கி வரைவோலை எண்: 375578, நாள்:02.02.2023. இவ்வலுவலகத்தில் பெறப்பட்ட நாள்: 04.02.2023

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பார்வையில் காணும் கடிதத்தின் படி தி/ள் வரலட்சுமி ஸ்டார்ச் இன்டஸ்டிரீஸ் பி. லிமிடெட், அலமேலுபுரம் கிராமம், பாப்பிரெட்டிப்பட்டி கிராமம் & வட்டம், தருமபுரி மாவட்டம் என்ற தொழிற்சாலையின் மீது தருமபுரி மாவட்ட வருவாய் அலுவலர் அவர்கள் தலைமையில் குழு அமைத்து [illegible] நடவடிக்கைக்கான செயல்முறை ஆணைகள் (6 பக்கங்கள்) மற்றும் 30.11.2022 அன்று நடைபெற்ற கூட்டத்தின் அறிக்கையின் நகல்கள் (157 பக்கங்கள்) என மொத்தம் 163 பக்கங்கள் சான்றிட்டு இக்கடிதத்துடன் இணைக்கப்பட்டுள்ளது என்ற தகவலானது தங்களுக்குத் தெரிவித்துக்கொள்ளப்படுகிறது.

இக்கடிதம் பெற்றுக் கொண்டதற்கான ஒப்புகை கோரப்படுகிறது.

இணைப்பு: மேற்கூறியவாறு

09/02/2023

பொது தகவல் அலுவலர் மற்றும்
மாவட்ட சுற்றுச்சூழல் பொறியாளர் (கூ/பொ),
தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம்.
தருமபுரி.

09/02/2023

(2)

தருமபுரி மாவட்ட ஆட்சித்தலைவர் அவர்களின் செயல்முறைகள்

முன்னிலை : திருமதி.கி.சாந்தி இ.ஆ.ப

ந.க.எண் : 0013/2022/த.நா.மா.க.வாரியம் நாள் : 15.11.2022

பொருள்: தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) – 09.11.2022 அன்று நடைபெற்ற ஆய்வுக் கூட்டம் - தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலுமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டு வரும் தி/ள்.வரலட்சுமி ஸ்டார்ச் இண்டஸ்டிரிஸ் தொழிற்சாலையை ஆய்வு செய்ய வேண்டி – மாவட்ட வருவாய் அலுவலர், தருமபுரி தலைமையில் குழு அமைத்து ஆய்வறிக்கை சமர்ப்பிக்க மற்றும் முதல் கூட்டம் நடத்த - ஆணையிடுதல் - தொடர்பாக.

பார்வை: 1. திரு.P.சுரேஷ் த/பெ பச்சையப்பன், ஒருங்கிணைப்பாளர், பீனி ஆறு பாதுகாப்பு விவசாயிகள் இயக்கம், அலமேலுபுரம், பாப்பிரெட்டிப்பட்டி, தருமபுரி மாவட்டம் அவர்களின் சட்டப் பேரவை மனுக்கள் குழுவிலிருந்து பெறப்பட்ட மனு எண் : 6988.

2. தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) ஆய்வுக் கூட்ட நாள் : 09.11.2022

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ஆணை :

தருமபுரி மாவட்டத்திற்கு 09.11.2022 அன்று வருகை புரிந்த தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) ஆய்வு செய்த மனுக்களின் பேரில் பார்வை 1-ல் கண்டுள்ளவாறு தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டுவரும் தி.ள்.வரலெஷ்மி ஸ்டார்ச் இண்டஸ்டிரிஸ் பி.லிட் தொழிற்சாலையின் கழிவுநீர் பீனியாற்றில் கலப்பதால் மக்களின் சுகாதாரம், மீன்கள் இறப்பு, கால்நடைகள் மற்றும் விவசாயம் பாதிப்பு அடைகிறது. மேலும் ஆற்றிலிருந்து சட்ட விரோதமாக நீர் எடுத்து குட்டை வெட்டி சேகரிப்பதாகவும், சீமைக் கருவேல மரங்கள வளர்ப்பதால் அப்பகுதி நிலத்தடி நீர் பாதிப்பு, மற்றும் பீனியாறு ஆற்றங்கரை ஆக்கரமிப்பு போன்ற தொழிற்சாலையின் செயல்பாடுகள் மீது நடவடிக்கை எடுக்க வேண்டி குழுவின் முன் புகார் தெரிவித்தனர்.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

இப்புகார் குறித்து சட்டமன்றப் பேரவை மனுக்கள் குழுவினர் தொழிற்சாலையை ஆய்வு செய்ய மாவட்ட வருவாய் அலுவலர் தலைமையில் குழு அமைத்து ஆய்வறிக்கையை ஒரு மாத காலத்திற்குள் சமர்ப்பிக்குமாறு பரிந்துரைத்தனர்.

எனவே தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழுவினரின் பரிந்துரைக்கிணங்க கீழ்க்கண்ட அலுவலர்களை நியமனம் செய்து ஆணையிடப்படுகிறது.

1.	மாவட்ட வருவாய் அலுவலர், தருமபுரி		தலைவர்
2.	இணை இயக்குநர் வேளாண்மை துறை, தருமபுரி	விவசாயம் பாதிப்பு மற்றும் சீமை கருவேல மரங்கள் வளர்ப்பது குறித்து	உறுப்பினர்
3.	செயற்பொறியாளர், பொதுப்பணித்துறை, நீர்வள ஆதார அமைப்பு, தருமபுரி	ஆற்றிலிருந்து நீர் எடுத்தல்	உறுப்பினர்
4.	செயற்பொறியாளர், பொதுப்பணித்துறை, நிலநீர் கோட்டம், வேலூர்	நிலத்தடி நீர் பாதிப்பு	உறுப்பினர்
5.	வருவாய் கோட்டாட்சியர், வருவாய்த்துறை, அரூர்	நில ஆக்கிரமிப்பு	உறுப்பினர்
6.	உதவி இயக்குநர், நிலஅளவை, தருமபுரி	நில ஆக்கிரமிப்பு	உறுப்பினர்
7.	உதவி இயக்குநர், மீன் வளத்துறை, தருமபுரி	மீன்கள் பாதிப்பு	உறுப்பினர்
8.	துணை இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம், தருமபுரி	இயந்திரங்கள் & தொழிலாளர்களின் பாதுகாப்பு	உறுப்பினர்
9.	செயற்பொறியாளர், தமிழ்நாடு குடிநீர் வடிகால் வாரியம், தருமபுரி	குடிநீரின் தரம்	உறுப்பினர்
10.	மாவட்ட நியமன அலுவலர் மற்றும் உணவு பாதுகாப்பு துறை, தருமபுரி	உற்பத்தி பொருட்களின் தரம்	உறுப்பினர்
11.	மாவட்ட சுற்றுச்சூழல் பொறியாளர், தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம், தருமபுரி	தொழிற்சாலை கழிவுநீர் சுத்திகரிப்பு குறித்து	உறுப்பினர் / ஒருங்கிணைப்பாளர்

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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மேற்காணும் குழு உறுப்பினர்கள் தொழிற்சாலையை ஆய்வு செய்து ஆய்வறிக்கையை 1 மாத காலத்திற்குள் மாவட்ட ஆட்சித்தலைவர், தருமபுரி அவர்களுக்கு சமர்ப்பிக்குமாறு ஆணையிடப்படுகிறது.

மாவட்ட ஆட்சித்தலைவர்
தருமபுரி

நகல் : 1. குழு உறுப்பினர்கள்

2. தலைவர், தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம், 76, மவுண்ட் சாலை, கிண்டி, சென்னை-32 அவர்களுக்கு தகவலுக்காக அனுப்பப்படுகிறது.

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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தருமபுரி மாவட்ட ஆட்சித்தலைவர் அவர்களின் செயல்முறைகள்

முன்னிலை : திருமதி.கி.சாந்தி இ.ஆ.ப

ந.க.எண் : 0013/2022/த.நா.மா.க.வாரியம் நாள் : 18 .11.2022

பொருள்: தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) – 09.11.2022 அன்று நடைபெற்ற ஆய்வுக் கூட்டம் - தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலுமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டு வரும் தி/ள்.வரலட்சுமி ஸ்டார்ச் இன்டஸ்டிரிஸ் தொழிற்சாலையை ஆய்வு செய்ய வேண்டி – மாவட்ட வருவாய் அலுவலர், தருமபுரி தலைமையில் அமைக்கப்பட்ட குழுவில் புதியதாக ஒரு உறுப்பினர் சேர்க்க - ஆணை வழங்குதல் - தொடர்பாக.

பார்வை: 1. திரு.P.சுரேஷ் த/பெ பச்சையப்பன், ஒருங்கிணைப்பாளர், பீனி ஆறு பாதுகாப்பு விவசாயிகள் இயக்கம், அலமேலுபுரம், பாப்பிரெட்டிப்பட்டி, தருமபுரி மாவட்டம் அவர்களின் சட்டப் பேரவை மனுக்கள் குழுவிலிருந்து பெறப்பட்ட மனு எண் : 6988

2. தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) ஆய்வுக் கூட்ட நாள் : 09.11.2022.

3. திரு.P.சுரேஷ் த/பெ பச்சையப்பன் அவர்கள் அரூர் வருவாய் கோட்டாட்சியர் அலுவலகத்தில் 04.11.2022 அன்று நடைபெற்ற விவசாய குறைத்தீர்க்கும் நாள் கூட்டத்தில் அளிக்கப்பட்ட புகார் மனு இவ்வலுவலகத்தில் பெறப்பட்ட நாள் : 14.11.2022.

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ஆணை :

தருமபுரி மாவட்டத்திற்கு 09.11.2022 அன்று வருகை புரிந்த தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) ஆய்வு செய்த மனுக்களின் பேரில் பார்வை 1-ல் கண்டுள்ளவாறு தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டுவரும் தி/ள்.வரலஷ்மி ஸ்டார்ச் இன்டஸ்டிரிஸ் பி.லிட் தொழிற்சாலையின் கழிவுநீர் பீனியாற்றில் கலப்பதால் மக்களின் சுகாதாரம், மீன்கள் இறப்பு, கால்நடைகள் மற்றும் விவசாயம் பாதிப்பு அடைகிறது.

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மேலும் ஆற்றிலிருந்து சட்ட விரோதமாக நீர் எடுத்து குட்டை வெட்டி சேகரிப்பதாகவும், சீமைக் கருவேல மரங்கள் வளர்ப்பதால் அப்பகுதி நிலத்தடி நீர் பாதிப்பு, மற்றும் பீனியாறு ஆற்றங்கரை ஆக்கரமிப்பு போன்ற தொழிற்சாலையின் செயல்பாடுகள் மீது நடவடிக்கை எடுக்க வேண்டி குழுவின் முன் புகார் தெரிவித்தனர்.

இப்புகார் குறித்து சட்டமன்ற பேரவை மனுக்கள் குழுவினர் தொழிற்சாலையை ஆய்வு செய்ய மாவட்ட வருவாய் அலுவலர் தலைமையில் குழு அமைத்து ஆய்வறிக்கையை ஒரு மாத காலத்திற்குள் சமர்ப்பிக்குமாறு பரிந்துரைத்தனர். அதனை தொடர்ந்து தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழுவினரின் பரிந்துரைக்கிணங்க மாவட்ட ஆட்சித்தலைவர் ஒப்புதலுடன் 15.11.2022 அன்று குழு அமைக்கப்பட்டு முதல் கூட்டம் 16.11.2022 அன்று மாலை 4.30 மணியளவில் மாவட்ட வருவாய் அலுவலர் அவர்கள் தலைமையில் நடைபெற்றது.

பார்வை 3-ல் கண்டுள்ள புகார் மனுவின் படி தி/ள்.வரலஷ்மி ஸ்டார்ச் இன்டஸ்டிரிஸ் பி.லிட் தொழிற்சாலையின் கழிவுநீர் பீனியாற்றில் கலப்பதால் பொதுமக்களுக்கு ஒவ்வாமை, தோல் அரிப்பு, செரிமான கோளாறு, தலைவலி, வாந்தி, பேதி மற்றும் புற்றுநோய் போன்ற பாதிப்புகள் ஏற்படுகிறது என்று மனுவில் கூறியுள்ளார். எனவே இது தொடர்பாக ஆய்வு மேற்கொள்ள வேண்டியுள்ளதால் ஏற்கனவே 15.11.2022 அன்று அமைக்கப்பட்ட குழுவில் புதிய உறுப்பினராக வ.எண்.12-ல உள்ள அலுவலரை நியமனம் செய்து ஆணையிடப்படுகிறது.

1.	மாவட்ட வருவாய் அலுவலர், தருமபுரி		தலைவர்
2.	இணை இயக்குநர் வேளாண்மை துறை, தருமபுரி	விவசாயம் பாதிப்பு மற்றும் சீமை கருவேல மரங்கள் வளர்ப்பது குறித்து	உறுப்பினர்
3.	செயற்பொறியாளர், பொதுப்பணித்துறை. நீர்வள ஆதார அமைப்பு, தருமபுரி	ஆற்றிலிருந்து நீர் எடுத்தல்	உறுப்பினர்
4.	செயற்பொறியாளர், பொதுப்பணித்துறை, நிலநீர் கோட்டம், வேலூர்	நிலத்தடி நீர் பாதிப்பு	உறுப்பினர்
5.	வருவாய் கோட்டாட்சியர், வருவாய்த்துறை, அரூர்	நில ஆக்கிரமிப்பு	உறுப்பினர்

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6.	உதவி இயக்குநர், நிலஅளவை, தருமபுரி	நில ஆக்கிரமிப்பு	உறுப்பினர்
7.	உதவி இயக்குநர், மீன் வளத்துறை, தருமபுரி	மீன்கள் பாதிப்பு	உறுப்பினர்
8.	துணை இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம், தருமபுரி	இயந்திரங்கள் & தொழிலாளர்களின் பாதுகாப்பு	உறுப்பினர்
9.	செயற்பொறியாளர், தமிழ்நாடு குடிநீர் வடிகால் வாரியம், தருமபுரி	குடிநீரின் தரம்	உறுப்பினர்
10.	மாவட்ட நியாமன அலுவலர் மற்றும் உணவு பாதுகாப்பு துறை, தருமபுரி	உற்பத்தி பொருட்களின் தரம்	உறுப்பினர்
11.	மாவட்ட சுற்றுச்சூழல் பொறியாளர், தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம், தருமபுரி	தொழிற்சாலை கழிவுநீர் சுத்திகரிப்பு குறித்து	உறுப்பினர் / ஒருங்கிணைப் பாளர்
12.	**துணை இயக்குநர், சுகாதாரம் தருமபுரி**	**நோய்கள் பற்றி ஆய்வு செய்தல்**	**உறுப்பினர்**

மேற்காணும் குழு உறுப்பினர்கள் தொழிற்சாலையை ஆய்வு செய்து ஆய்வறிக்கையை 1 மாத காலத்திற்குள் மாவட்ட ஆட்சித்தலைவர், தருமபுரி அவர்களுக்கு சமர்ப்பிக்குமாறு ஆணையிடப்படுகிறது.

மாவட்ட ஆட்சித்தலைவர்
தருமபுரி

நகல் : 1. குழு உறுப்பினர்கள்

2. தலைவர், தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம், 76, மவுண்ட் சாலை, கிண்டி, சென்னை-32 அவர்களுக்கு தகவலுக்காக அனுப்பப்படுகிறது

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க. அனிதா,
மாவட்ட வருவாய் அலுவலர்,
தருமபுரி.

மாவட்ட ஆட்சித்தலைவர்,
தருமபுரி.

ந.க.எண். 0013/2022/த.நா.மா.க. வாரியம், நாள்: 23.01.2023

மதிப்பிற்குரிய அம்மையீர்,

பொருள்: தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) ஆய்வு செய்த மனுக்களில் பாப்பிரெட்டிப்பட்டி வட்டம், அலமேலுபுரம் கிராமத்தில் செயல்பட்டு வரும் தி/ள். வரலட்சுமி ஸ்டார்ச் இன்டஸ்டிரிஸ் பி.லிட் தொழிற்சாலையின் கழிவு நீர் பீனயாற்றில் கலப்பதாக அளிக்கப்பட்ட மனு தொடர்பாக தொழிற்சாலையின் செயல்பாடுகள் குறித்து ஆய்வு செய்து- அறிக்கை சமர்ப்பித்தல் தொடர்பாக

23/1/2023

பார்வை:1. தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) – மனு எண். 6988, திரு. சுரேஷ், த/பெ. பச்சையப்பன் என்பவரின் மனு
2. மாவட்ட ஆட்சித்தலைவரின் செயல்முறை ஆணை: ந.க.எண்.0013/த.நா.மா.க. வாரியம், நாள்: 18.11.2022

DE Pollution Control Board.

தருமபுரி மாவட்டத்திற்கு 09.11.2022 அன்று வருகை புரிந்த தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) ஆய்வு செய்த மனுக்களில் பேரில் திரு.ப.சுரேஷ் த/பெ பச்சையப்பன், பீணி ஆறு பாதுகாப்பு விவசாயிகள் இயக்கம், ஒருங்கிணைப்பாளர், 6/36, அலுமேலுபுரம் கிராமம் & அஞ்சல், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம் அவர்கள் அளித்த மனுவில் (மனு எண். 6988) தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டுவரும் தி/ள்.வரலஷ்மி ஸ்டார்ச் இன்டஸ்டிரிஸ் பி.லிட் தொழிற்சாலையின் கழிவுநீர் பீணியாற்றில் கலப்பதால் மீன்கள் இறப்பு, கால்நடைகள் மற்றும் விவசாயம் பாதிப்பு, பொதுமக்களுக்கு ஒவ்வாமை, தோல் அரிப்பு, செரிமான கோளாறு, தலைவலி, வாந்தி, பேதி மற்றும் புற்றுநோய் போன்ற பாதிப்புகள் ஏற்படுவதாக தெரிவித்திருந்தனர். மேலும் ஆற்றிலிருந்து சட்ட விரோதமாக நீர் எடுத்து குட்டை வெட்டி சேகரிப்பதாகவும், சீமைக் கருவேல மரங்கள் வளர்ப்பதால் அப்பகுதி நிலத்தடி நீர் பாதிப்பு, மற்றும் பீணியாறு ஆற்றங்கரை ஆக்கிரமிப்பு போன்ற தொழிற்சாலையின் செயல்பாடுகள் மீது நடவடிக்கை எடுக்க வேண்டி குழுவின் முன் புகார் அளித்தது குறித்து சட்டமன்றப் பேரவை மனுக்கள் குழுவினர் தொழிற்சாலையை ஆய்வு செய்ய மாவட்ட வருவாய் அலுவலர் தலைமையில் குழு அமைத்து ஆய்வறிக்கையை ஒரு மாத காலத்திற்குள் சமர்ப்பிக்குமாறு பரிந்துரைத்தனர். அதனைத் தொடர்ந்து தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழுவினரின் பரிந்துரைக்கிணங்க மாவட்ட ஆட்சித்தலைவர் ஒப்புதலுடன் 18.11.2022 அன்று பார்வை 2-ல் காணும் செயலமுறை ஆணையின் படி அமைக்கப்பட்ட ஆய்வுக் குழு மாவட்ட வருவாய் அலுவலர் அவர்கள் தலைமையில் 11 துறைகளுடன் சேர்ந்து 30.11.2022 அன்று கூட்டுப் புலத்தணிக்கை செய்யப்பட்டதின் ஆய்வறிக்கையின் விபரங்கள்/ பரிந்துரைகள் பின்வருமாறு.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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1. வேளாண்மை துணை இயக்குநர் (உழவர் பயிற்சி நிலையம்), தருமபுரி

- தொழிற்சாலையில் சீமைக்கருவேல மரங்கள் வளர்ப்பதால் பல்லுயிரியம் (Biodiversity) பாதிப்படைய வாய்ப்புள்ளது.
- சீமைக்கருவேல மரங்களுக்கு மாற்றாகவும், தொழிற்சாலைகளிலிருந்து வரும் கழிவுநீரினை திறம்பட கையாளவும், தழைச்சத்தை மண்ணில் நிலைநிறுத்தவும் சவுக்கு மரங்களின் இரகமான TNAU Casurina MTP 1 மற்றும் TNAU Casurina MTP 2 வினை ஒவ்வொரு கட்டமாக நடவு செய்யலாம் என பரிந்துரைக்கப்பட்டுள்ளது.

2. செயற்பொறியாளர், நீர் வளத்துறை, மேல்பெண்ணையாறு வடி நிலக்கோட்டம், தருமபுரி

ஆய்வில் கண்டறியப்பட்டவை

- கடந்த 1998 முதல் மேற்படி ஆலை இயங்கி வருவதாகவும், ஆலை பயன்பாட்டிற்கு தேவையான தண்ணீர் எடுக்க ஆலைக்கு சொந்தமாக ஆழ்துளை கிணறு அல்லது திறந்த வெளி கிணறு ஏதும் இருப்பதாக தெரியவில்லை.
- தி/ள்.வரலட்சுமி கிழங்கு அரவை ஆலை வளாகத்திற்குள் பீணியாற்றின் கரையை ஒட்டி சுமார் 160X88மீ, 106X26 மீ பரப்பளவில் குட்டை ஒன்று நீர்வளத்துறை அனுமதியில்லாமல் வெட்டப்பட்டுள்ளது.
- பீணியாற்றிலிருந்து சட்டவிரோதமாக தண்ணீர் எடுத்து ஆலையில் வெட்டப்பட்டுள்ள குட்டையில் குழாய் மூலம் தண்ணீர் நிரப்பப்பட்டு ஆலை பயன்பாட்டிற்கு பயன்படுத்தப்பட்டு வருகிறது.
- ஆற்றின் கரை ஆக்கிரமிப்பு செய்யப்பட்டுள்ளது.
- ஆலையில் இருந்து வெளியேறும் கழிவு நீர் பீணியாற்றில் கலக்குமாறு குழாய் பதிக்கப்பட்டுள்ளது.

3. செயற்பொறியாளர், நிலநீர் கோட்டம், நீர்வள ஆதார துறை, வேலூர்

ஆய்வில் கண்டறியப்பட்டவை

- தொழிற்சாலை நிலத்தடிநீரை தொழிற்சாலையின் பயன்பாட்டிற்கு பயன்படுத்தவில்லை எனவும், மேலும் தொழிற்சாலையின் வளாகத்திற்குள் 14702.98 ச.மீ அளவிற்கு குளம் வெட்டி மழைநீரை சேகரித்தும் பயன்படுத்தபடுவதாக அறியப்பட்டது.
- நிலத்தடிநீர் உறிஞ்சுவதற்கு எவ்விக கட்டமைப்பும் தொழிற்சாலை வளாகத்திற்குள் அமைக்கப்படவில்லை.
- குளத்திலிருந்து மேற்பரப்பு நீரினை எடுப்பதற்கு அனுமதி பெறப்படவில்லை
- நிலத்தடிநீரின் தன்மை அறிவதற்கு 8 கிணறுகளில் இருந்து நீர் மாதிரிகள் சேகரிக்கப்பட்டுள்ளது.
- 8 கிணறுகள் மற்றும் அருகிலுள்ள கிணறுகளின் நீரின் அளவுகள் கண்டறியப்பட்டது.

4. வட்டாட்சியர், வருவாய்த்துறை, பாப்பிரெட்டிப்பட்டி

மேற்படி வரலட்சுமி ஸ்டார்ச் இண்டஸ்ட்ரீஸ் ஆலையானது பாப்பிரெட்டிப்பட்டி மற்றும் அலமேலுபுரம் கிராமங்களில் கீழ்க்கண்ட புலங்களில் அமைந்துள்ளது.

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வ.எண்	கிராமம் மற்றும் பட்டா எண்	பரப்பு
1	அலமேலுபுரம் பட்டா எண். 18	1.31.50
2	அலமேலுபுரம் பட்டா எண். 25	13.72.00
3	அலமேலுபுரம் பட்டா எண். 37	6.89.00
4	பாப்பிரெட்டிப்பட்டி பட்டா எண். 287	9.98.50
5	பாப்பிரெட்டிப்பட்டி பட்டா எண். 1363	0.81.00
	மொத்தம்	32.72.00

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மாவட்ட ஆட்சியரின் நேர்முக உதவியாளர் (நிலப்பிரிவு), தருமபுரி

தி/ள்.வரலட்சுமி ஸ்டார்ச் இன்டஸ்ட்ரீஸ் பிரைவேட் லிமிடெட் பாப்பிரெட்டிப்பட்டி

நில சீர்திருத்தம் (உச்சவரம்பை நிர்ணயித்தல்) சட்டப் பிரிவு 37(ஏ)

37(ஏ)ன் கீழ் அனுமதி கோரி விண்ணப்பித்த நாள்	:	07.06.20210
நிறுவனம் அமைந்துள்ள இடம்	:	பாப்பிரெட்டிப்பட்டி, அலமேலுபுரம்
பரப்பளவு	:	பாப்பிரெட்டிப்பட்டி 54.16 ஏக்கர் அலமேலுபுரம் 26.66 ஏக்கர்
மொத்த பரப்பு	:	80.82 ஏக்கர்
சென்னை நிலச்சீர்திருத்த ஆணையருக்குமுன்மொழிவு அனுப்பிய நாள்	:	30.09.2019
குறைகளைவு அறிக்கை கோரப்பட்ட விவரம்	:	பாப்பிரெட்டிப்பட்டி கிராம புல எண்:75/1பி விண்ணப்பிக்காமல் விடுப்பட்டது தொடர்பாக அரசுக்கு விண்ணப்பம் செய்ய அறிவுறுத்தப்பட்டது
அமானம் வைத்திருக்கும் நிலத்தின் பரப்பளவு	:	21.25 ஏக்கர்

5. உதவி இயக்குநர்(கூ/பொ), நிலஅளவை, தருமபுரி

தி/ள்.வரலட்சுமி ஸ்டார்ச் இன்டஸ்ட்ரீஸ் பிரைவேட் லிமிடெட், தர்மபுரி மாவட்டம் பாப்பிரெட்டிப்பட்டி வட்டம், பாப்பிரெட்டிப்பட்டி மற்றும் அலமேலுபுரம் கிராம புல எண்: 71,120,126,127,135/1,139,140-ல் புலத்தணிக்கை மற்றும் அளவு பணி மேற்கொண்டு, கிராம புலப்பட கணக்கியில் உள்ள அளவுகளின் படி நீர்வள ஆதாரத்துறை செயற்பொறியாளர் முன்னிலையில் பாப்பிரெட்டிப்பட்டி வட்டத்துணை ஆய்வாளர், அரூர் கோட்ட ஆய்வாளரால் கூட்டு புலத்தணிக்கை மேற்கொண்டு அளந்து அத்து காண்பிக்கப்பட்டதில் மேற்படி புலங்களில் ஆக்கிரமிப்பு ஏதும் கண்டறியப்படவில்லை என தெரிவிக்கப்பட்டுள்ளது.

6. உதவி இயக்குநர், மீன்வளத்துறை, தருமபுரி

- ஆய்வின் போது ஆற்றில் நீர் மாதிரிகள் சேகரிக்கப்பட்டு கிருஷ்ணகிரி மாவட்டம், பாரூரில் உள்ள தமிழ்நாடு ஜெ.ஜெயலலிதா மீன்வள பல்கலைக்கழகத்தின் வளங்குன்றா நீருயிரி வளர்ப்பு மையத்தில் நீரின் தரம் ஆய்வு செய்யப்பட்டதில் நீரின் கடினதன்மை அதிகமாக இருப்பதாக கண்டறியப்பட்டுள்ளது. இவை மீனின் வளர்ச்சியை பாதிக்கக கூடியதாகும்.
- மேலும் ஆய்வின் போது எவ்வித மீன்கள் இறப்பும் இல்லை என தெரிவிக்கப்பட்டுள்ளது.

7. துணை இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம், தருமபுரி

16.02.2022 அன்று இணை இயக்குநர், தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம், ஒசூர் அவர்களால் ஆய்வு மேற்கொண்டதில் சில பாதுகாப்பு குறைப்பாடுகளை சரி செய்ய தொழிற்சாலை நிர்வாகத்திற்கு அறிவுறுத்தப்பட்டது. 30.11.2022 அன்று மாவட்ட வருவாய் அலுவலர் அவர்கள்

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தலைமையில் ஆய்வு மேற்கொண்ட போது குறைபாடுகள் சரிசெய்யப்பட்டிருப்பதும், மேலும் கீழ்கண்ட கூடுதல் பாதுகாப்பு நடவடிக்கைகள் மேற்கொள்ள தொழிற்சாலைக்கு அறிவுறுத்தப்பட்டுள்ளது.

- ❖ தொழிற்சாலையில் Sago Plant Conveyor underground பகுதிக்கு செல்வதற்காக அமைக்கப்பட்டுள்ள படிகட்டிற்கு கைப்பிடி அமைக்க வேண்டும்.
- ❖ தொழிற்சாலையில் பயன்பாட்டிலுள்ள தொட்டி (Tank) மற்றும் இயந்திரங்களுக்கு மேலே ஏறி செல்ல அமைக்கப்பட்டுள்ள 2 மீட்டருக்கு மேல் உள்ள ஏணிகளுக்கு இருபுறமும் பிடித்து கொள்ள கைப்பிடி அமைக்க வேண்டும்.
- ❖ தொழிற்சாலையில் Machine Shop-ல் பயன்பாட்டிலுள்ள Lathe Motor Belt Drive மற்றும் உற்பத்தி அறையில் உள்ள அனைத்து இயந்திரங்களின் பாதுகாப்பு கவசம் இல்லாத Motor belt drive களுக்கு உறுதியான பாதுகாப்பு கவசம் பொருத்தப்பட வேண்டும். ETP நடைபாதைக்கு அருகிலுள்ள கழிவுநீர் சேமித்து வைப்பதற்காக அமைக்கப்பட்டுள்ள 3 அடி தொட்டிக்கு 3 அடி உயரத்திற்கு சுற்றுச்சுவர் அல்லது கைப்பிடி அமைக்கப்பட வேண்டும்.
- ❖ Maize Plant-ல் பொருட்களை எடுத்து செல்லும் Lift நிறுவுவதற்காக அமைக்கப்பட்டுள்ள பள்ளத்திற்குள் தொழிலாளர்கள் விழாமல் இருக்க Lift opening பகுதிக்கு 3 அடி உயரத்திற்கு பாதுகாப்பு தடுப்பு அமைக்கப்பட வேண்டும்
- ❖ தொழிற்சாலையில் புதிதாக கட்டப்பட்டு வரும் ETP-ன் கட்டுமானங்கள் மற்றும் Sago Plant-ல் புதிதாக நிறுவப்படும் இயந்திரங்களுக்கு கூடுதல் வரைபட ஒப்புதல் பெறப்பட வேண்டும்.

8. நிர்வாகப் பொறியாளர், தமிழ்நாடு குடிநீர் வடிகால் வாரியம், திட்டக் கோட்டம், கிருஷ்ணகிரி

பீனி ஆறு பாதுகாப்பு விவசாயிகள் இயக்க ஒருங்கிணைப்பாளர்கள் குறிப்பிட்ட 8 கிராமங்களில் இருந்து குடிநீர் சேகரித்து ஆய்வு செய்யும் படி கோரிக்கை வைத்தார்கள். இதன் அடிப்படையில் 06.12.2022 அன்று கீழ்கண்ட கிராமங்களில் குடிநீர் மாதிரிகள் சேகரித்து தமிழ்நாடு குடிநீர் வடிகால் வாரியத்தின் மூலம் செயல்பட்டு வரும் மாவட்ட குடிநீர் பகுப்பாய்வு மையத்தில குடிநீரின் தரம் ஆய்வு செய்யப்பட்டது. ஆய்வு செய்யப்பட்டதின் அறிக்கை பின்வருமாறு

வ.எண்	கிராமங்களின் பெயர்கள்	குடிநீர் சேகரித்த இடங்கள்	பரிசோதனை முடிவுகள
1.	அதிகாரப்பட்டி	மைல்கல் புளியமரம் சிறு விசை மின் பம்பு – M.P.P	குடிநீர் பயன்பாட்டிற்கு உகந்ததல்ல (புளுரைடு அதிகம்)
2.	அதிகாரப்பட்டி	குமரவேல் வீட்டிற்கு அருகில் துணை மின்நிலைய மின் பம்பு - IPP	குடிநீர் பயன்பாட்டிற்கு உகந்தது
3.	அ.பள்ளிப்பட்டி	காவல் நிலையம் அருகில் (மேல்நிலை நீர் தேக்க தொட்டி – OHT)	குடிநீர் பயன்பாட்டிற்கு உகந்தது
4.	கவுண்டம்பட்டி	தோழனூர் ரோடு (திறந்த வெளி கிணறு-O Well)	குடிநீர் பயன்பாட்டிற்கு உகந்தது
5.	புதுப்பட்டி	அங்கன்வாடி மையம் அருகில் (மேல்நிலை நீர் தேக்க தொட்டி – OHT)	குடிநீர் பயன்பாட்டிற்கு உகந்தது
6.	இருளப்பட்டி	காளியம்மன் கோயில் அருகில் (மேல்நிலை நீர் தேக்க தொட்டி – OHT)	குடிநீர் பயன்பாட்டிற்கு உகந்தது
7.	அலமேலுபுரம்	தேன்மொழி வீட்டின் அருகில் (கைபம்பு – HP)	குடிநீர் பயன்பாட்டிற்கு உகந்ததல்ல (குடினத்தன்மை)
8.	கோட்டைமேடு	மாரியம்மன் கோயில் பின்புறம் (மேல்நிலை நீர் தேக்க தொட்டி – OHT)	குடிநீர் பயன்பாட்டிற்கு உகந்தது

வரிசை எண் 1 மற்றும் 7 ஆகிய இரண்டு மாதிரிகள் குடிநீர் பயன்பாட்டிற்கு பயன்படுத்த முடியாதவைகளாக உள்ளது என தெரிவிக்கப்பட்டுள்ளது.

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30.11.2022 அன்று ஆய்வு மேற்கொண்டதில் தொழிற்சாலை செயல்படவில்லை. மேலும் தொழிற்சாலையில் சேமித்து வைக்கப்பட்டிருந்த மரவள்ளி கிழங்கு மாவு மற்றும் மக்கா சோளமாவு மாதிரிகள் சேகரிக்கப்பட்டு சென்னையிலுள்ள கிண்டி உணவு பகுப்பாய்வு கூடத்திற்கு ஆய்விற்காக அனுப்பப்பட்டது. ஆய்வின் முடிவில் உணவு பாதுகாப்பு மற்றும் தர சட்ட விதிகளின் படி உணவு மாதிரிகள் தரமானவை என அறிக்கை பெறப்பட்டுள்ளது. (12)

10. துணை இயக்குநர், சுகாதாரப்பணிகள், தருமபுரி

- ❖ தொழிற்சாலையை சுற்றியுள்ள கிராமங்களில் வசிக்கும் பொதுமக்களிடம் பரிசோதனை மேற்கொண்டதில் தொழிற்சாலையின் கழிவுநீர் பீனியாற்றில் கலப்பதனால் பொதுமக்களுக்கு எவ்வித நோய் பாதிப்புகளும் இல்லை என தெரிவிக்கப்பட்டுள்ளது.
- ❖ இப்பகுதி மக்கள் நிலத்தடி நீர் மாசுடைந்தும், உப்பு தன்மை அதிகமாக இருப்பதாலும் ஒகேனக்கல் குடிநீரை மட்டுமே பயன்படுத்தி வருவதாக தெரிவிக்கப்பட்டுள்ளது.

11. மாவட்ட சுற்றுச்சூழல் பொறியாளர், தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம், தருமபுரி

- ❖ தி/ள்.வரலஷ்மி ஸ்டார்ச் இன்டஸ்டிரிஸ் பி.லிட் என்ற தொழிற்சாலையானது மாதம் ஒன்றிற்கு 11,500 டன் மரவள்ளி கிழங்கு மற்றும் மக்காசோள மாவு, ஜவ்வரிசி மற்றும் அப்பளம் உற்பத்தி செய்ய தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தின் இசைவாணையை 31.03.2021 வரை பெற்றுள்ளது.
- ❖ இத்தொழிற்சாலையிலிருந்து நாளொன்றிற்கு 500.1 கிலோ லிட்டர் தொழிற்கழிவுநீரை வெளியேற்றி வருகிறது. இத்தொழிற்கழிவுநீரினை சுத்திகரிப்பு நிலையத்தின் மூலம் சுத்திகரித்து தொழிற்சாலை வளாகத்தினுள் சுமார் 50 ஏக்கர் பரப்பளவில் உள்ள சீமை கருவேல மரங்களை வளர்ப்பதற்கு பயன்படுத்தி வருகிறது.
- ❖ மேலும் இத்தொழிற்சாலையில் சீமை கருவேல மரங்கள் வளர்ப்பது தொடர்பாக தமிழ்நாடு வேளாண் ஆராய்ச்சி மற்றும் பல்கலைக் கழகம், பாப்பாரப்பட்டியின் மூலம் ஆய்வு மேற்கொள்ளப்பட்டு, ஆய்வறிக்கையில் சீமை கருவேல மரங்களுக்கு மாற்றாக சவுக்கு மரம், தைலமரம், மலைவேம்பு போன்ற மரங்களை வளர்ப்பதற்கு அறிவுறுத்தப்பட்டது.
- ❖ இத்தொழிற்சாலையில் சுத்திகரிக்கப்பட்ட தொழிற்கழிவுநீர் மாதிரிகள் நவம்பர்-2021 டிசம்பர்-2021 ஆகிய மாதங்களில் சேகரிக்கப்பட்டு பகுப்பாய்வு செய்யப்பட்டது. ஆய்வறிக்கையில் Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD) ஆகிய அளவுருக்கள் வாரியம் நிர்ணயித்த தர அளவை விட (Inland Surface Water Standards) மிகுந்து இருப்பது கண்டறியப்பட்டது.
- ❖ மேலும் தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தின் நிபந்தனைகளை பின்பற்றாத காரணத்தினால் 18.04.2022 தேதியிட்ட வாரிய வழிகாட்டுதல்கள் தொழிற்சாலையினருக்கு வழங்கப்பட்டது. இத்தொழிற்சாலையானது தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தால் தொடர்ந்து கண்காணிக்கப்பட்டு சுத்திகரிக்கப்பட்ட தொழிற்கழிவுநீர் மாதிரிகள் சேகரிக்கப்பட்டு பகுப்பாய்வு செய்யப்பட்டது. தொழிற்சாலையின் மீது தொடர்ந்து புகார் மனுக்களும் பெறப்பட்டு வந்தது.
- ❖ இத்தொழிற்சாலை வாரிய வழிகாட்டுதல்களை பின்பற்றாமல் தொடர்ந்து இயங்கிய காரணத்தினால், இணை தலைமை சுற்றுச்சூழல் பொறியாளர் (கண்காணிப்பு) வேலூர் அவர்கள் 04.08.2022 அன்று தொழிற்சாலையின் மீது ஆய்வு மேற்கொண்டதுடன், இத்தொழிற்சாலையின்

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இயக்கம் குறித்து நிர்வாகத்தினருடன் 22.08.2022 அன்று நேர்முக விசாரணை (Personal Hearing) மேற்கொள்ளப்பட்டது.

- ஜனவரி -2022 முதல் ஜீன்-2022 வரை சுத்திகரிக்கப்பட்ட தொழிற்கழிவுநீர் மாதிரிகள் சேகரித்து பகுப்பாய்வு செய்யப்பட்ட ஆய்வறிக்கையில் Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD) ஆகிய அளவுருக்கள், தொடர்ந்து வாரியம் நிர்ணயித்த தர அளவை விட (Inland Surface Water Standards) மிகுந்து இருப்பது கண்டறியப்பட்டது.
- தொடர்ந்து தொழிற்சாலையானது வாரிய வழிமுறைகளை கடைப்பிடிக்காமல் இயங்கியதால் தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தால் மீண்டும் 17.10.2022 தேதியிட்ட வாரிய வழிகாட்டுதல்கள் தொழிற்சாலைக்கு வழங்கப்பட்டது.
- தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தின் வழிகாட்டுதல்களின் படி தொழிற்சாலை செயல்படாத காரணத்தினாலும், செல்லத்தக்க இசைவாணை இல்லாமல் இயங்கி வந்ததாலும் 08.11.2022 அன்று தொழிற்சாலையின் மின் இணைப்பு துண்டிக்கப்பட்டது.
- தொழிற்சாலை நிர்வாகத்தினரால் தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்திற்கு எதிராக மாண்புமிகு தேசிய பசுமை தீர்ப்பாயத்தில் வழக்கு தொடரப்பட்டது. மாண்புமிகு தேசிய பசுமை தீர்ப்பாயத்தின் ஆணையின் படி 12.12.2022 அன்று மீண்டும் தமிழ்நாடு மின்சார வாரியத்தின் மூலம் மின் இணைப்பு பெற்று தொழிற்சாலையானது இயங்கி வருகிறது.

தி/ள்.வரலஷ்மி ஸ்டார்ச் இன்டஸ்டிரிஸ் பி.லிட், பாப்பிரெட்டிப்பட்டி தொழிற்சாலையின் உரிமையாளர் அவர்கள் கூறியதன் பேரில் 7 இராசாயன தொழிற்சாலைகளில் 30.11.2022 ஆய்வு மேற்கொண்ட விபரங்கள்

தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டத்தில் அமைந்துள்ள 7 இரசாயன தொழிற்சாலைகளில் 30.11.2022 அன்று மாவட்ட வருவாய் அலுவலர் அவர்கள் தலைமையில் பாப்பிரெட்டிப்பட்டி வட்டாட்சியர், மாவட்ட சுற்றுச்சூழல் பொறியாளர் மற்றும் உதவி சுற்றுச்சூழல் பொறியாளர் ஆகியோரால் ஆய்வு மேற்கொள்ளப்பட்டது. ஆய்வு குறித்த விபரங்களின் பட்டியல் கீழ்க்கண்டவாறு

வ. எண்	தொழிற்சாலையின் பெயர் மற்றும் முகவரி	உற்பத்தி செய்யப்படும் பொருட்கள் மற்றும் அளவு	வெளியேற்றப் படும் தொழிற் கழிவுநீர் விபரம்	இசை வாணை கூறித்த விபரம்	குறிப்பு
1.	தி/ள்.எவ்லா கெம் இன்டஸ்டிரிஸ் (இந்தியா) பி.லிட், புல எண் : 10 சின்னமஞ்சவாடி கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்	பேரியம் கார்பனேட் - 600டன்/மாதம் சோடியம் சல்பேட் பிளேக்ஸ் - 350 டன்/மாதம் **உப பொருட்கள்** கழுவப்பட்ட மண் கட்டிட கற்கள் - 1200 கற்கள் /நாளொன்றுக்கு	100 லிட்டர்/ நாளொன்றுக்கு (Cooling Tower bleed off) சூரிய ஆவியாதல் தொட்டி மூலம் ஆவியாதல். கழிவுநீர் வெளியேற்ற படுவது இல்லை	31.03.2025	இயக்கத்தில் உள்ளது (50 % Production)
2.	தி/ள்.ஹைடெக் கெமிக்கல், புல எண் : 11/6A கல்லாத்துப்பட்டி கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்	பேரியம் நைட்ரேட் - 150டன்/மாதம்	தொழிற் கழிவுநீர் உற்பத்தி இல்லை	31.03.2025	01.03.2022 முதல் இயக்கத்தில் இல்லை
3.	தி/ள்.ஸ்ரீ அம்மன் கெமிக்கல், புல எண் : 11/6A	சோடியம் சல்பைடு பிளேக்ஸ் பிட்ஸ் அன்ட் ஃலிட்ஸ்-	தொழிற் கழிவுநீர் உற்பத்தி	31.03.2025	01.01.2022 முதல் இயக்கத்தி

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	பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்				
4.	தி/ள்.லெதர் அண்ட் டெக்ஸ்டைல்ஸ் கெமிக்கல்ஸ், புல எண் : 11/6A கல்லாத்துப்பட்டி கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்	சோடியம் சல்பைடு பிளேக்ஸ் - 50 டன்/மாதம் பிட்ஸ் -15 டன்/மாதம் சாலிட் -10 டன்/மாதம்	தொழிற் கழிவுநீர் உற்பத்தி இல்லை	31.03.2025	01.01.2022 முதல் இயக்கத்தில் இல்லை
5.	தி/ள்.சிவா கெமிக்கல், புல எண் : 11/6A கல்லாத்துப்பட்டி கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்	பேரியம் குளோரைடு கிரிஸ்டல்ஸ் - 99.450 டன்/மாதம் பேரியம் குளோரைடு சொல்யூசன் - 186.900 டன்/மாதம்	10 லிட்டர்/ நாளொன்றுக்கு (Scrubber Liquor) சூரிய ஆவியாதல் தொட்டி மூலம் ஆவியாதல். தொழிற் கழிவுநீர் வெளியேற்ற படுவது இல்லை	31.03.2024	01.04.2022 முதல் இடையிடையே 6 நாட்கள் மட்டுமே இயக்கத்தில் இருந்தது.
6.	தி/ள்.சிவசக்தி கெமிக்கல், புல எண் : 11/6A கல்லாத்துப்பட்டி கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்	சோடியம் சல்பைடு பிளேக்ஸ் பிட்ஸ் அண்ட் சாலிட்ஸ் - 150 டன்/மாதம்	10 லிட்டர்/ நாளொன்றுக்கு (Recycling condensate from evaporator) உற்பத்தியின் மறுசுழற்சிக்கு பயன்படுத்தப் பட்டு வருகிறது	31.03.2025	01.01.2022 முதல் இயக்கத்தில் இல்லை
7.	தி/ள்.அக்ரோ நீட்ஸ் புல எண் : 40/4 நொணங்கனூர் கிராமம், பாப்பிரெட்டிப்பட்டி வட்டம், தருமபுரி மாவட்டம்	மக்னீசியம் சல்பேட் - 250 டன்/மாதம்	தொழிற் கழிவுநீர் உற்பத்தி இல்லை	31.03.2022	01.01.2022 முதல் இயக்கத்தில் இல்லை

ஆய்வின் போது மேற்கண்ட இத்தொழிற்சாலைகளில் இருந்து எவ்வித தொழிற்கழிவு நீரும் வெளியேற்றப்படுவதில்லை என கண்டறியப்பட்டுள்ளது.

மாவட்ட ஆட்சித்தலைவர் ஒப்புதலுடன் அமைக்கப்பட்ட 11 துறைகள் கொண்ட குழுவில் 7 துறைகளின் ஆய்வறிக்கைகளின் அடிப்படையில் மேற்கண்ட தொழிற்சாலையின் செயல்பாடுகளில் விதிமீறல்கள் இருப்பது உறுதி செய்யப்பட்டுள்ளதால் உரிய நடவடிக்கை எடுக்கும்பொருட்டு அரசிற்கு அறிக்கை அனுப்பலாம். இத்துடன் குழு உறுப்பினர்கள் அளித்த ஆய்வறிக்கையை இணைத்துள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக்கொள்கிறேன்.

23/01/2023

மாவட்ட வருவாய் அலுவலர்

தருமபுரி

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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வேளாண்மை – உழவர் நலத்துறை

04 JAN 2023

அனுப்புநர்

திருமதி.க.விஜயா, பி.எஸ்.சி.(விவ),
வேளாண்மை துணை இயக்குநர்,
உழவர் பயிற்சி நிலையம்,
தருமபுரி–5.

பெறுநர்

மாவட்ட சுற்றுச்சூழல் பொறியாளர்,
தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம்,
அதியமான் கோட்டை ஒசூர் புறவழிச்
சாலை, ஏ.ரெட்டி அள்ளி கிராமம்,
தருமபுரி வட்டம் & மாவட்டம் - 636 809

கடிதம் எண்.இ4/ 8786 /2022, நாள்: 29.12.2022.

ஐயா,

பொருள் : தமிழ்நாடு சட்டமன்றப் பேரவை மனுக்கள் குழு (2021-2023) – 09.11.2022 அன்று நடைபெற்ற ஆய்வுக் கூட்டம் – தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலுமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டு வரும் வரலட்சுமி ஸ்டார்ச் இண்டஸ்டிரிஸ் தொழிற்சாலையை 30.11.2022 அன்று ஆய்வு செய்த விவரம் சமர்ப்பித்தல் – தொடர்பாக.

பார்வை : 1. தருமபுரி, மாவட்ட சுற்றுச்சூழல் பொறியாளர் அவர்களின் கடிதம் எண். கோ.0013/மா.சு.சூ.பொ/தநாமாகவா/தருமபுரி/2022, நாள்: 18.11.2022.
2. வேளாண்மை அறிவியல் நிலையம், பாப்பாரப்பட்டி ஆய்வு குழுவின் ஆய்வு குறிப்பு நாள்.02.02.2022

பார்வையில் காணும் கடிதத்தின்படி, தருமபுரி மாவட்டம் பாப்பிரெட்டிப்பட்டி வட்டம், அலுமேலுபுரம் மற்றும் பாப்பிரெட்டிப்பட்டி கிராமத்தில் செயல்பட்டு வரும் வரலட்சுமி ஸ்டார்ச் இண்டஸ்டிரிஸ் தொழிற்சாலையை 30.11.2022 அன்று மாவட்ட வருவாய் அலுவலர் அவர்கள் தலைமையில் ஆய்வு மேற்கொள்ளப்பட்டது. இந்த ஆய்வின் அடிப்படையிலும் மற்றும் பார்வை 2 இல் காணும் ஆய்வின் அடிப்படையிலும் ஆய்வு குறிப்பு கீழ்காணுமாறு தெரிவிக்கப்படுகிறது.

சீமை கருவேல மரங்கள் வெகு விரைவாகவும், அடுத்தடுத்த நிலப்பரப்பை அக்கிரமித்து வளரும், பரவும் இடங்களில் உள்ள பல்லுயிரியம் (Biodiversity) பாதிப்படைய வாய்ப்பு உள்ளது.

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எனவே சீமை கருவேல மரங்களுக்கு மாற்றாகவும், தொழிற்சாலைகளில் இருந்து வரும் கழிவு நீரினை திறம்பட கையாளவும், சவுக்கு மரங்களை (Casurina) ஒவ்வொரு கட்டமாக நடவு செய்யலாம். மேலும் அதற்கேற்ற இரகமான TNAU Casurina MTP 1, TNAU Casurina MTP 2 இரகங்களை நடவு மேற்கொள்ளலாம். சவுக்கு மரம் வேகமாக வளரக்கூடியது, தழைச்சத்தை மண்ணில் நிலைநிறுத்தும் தன்மை கொண்டது மற்றும் அனைத்து வகையான வேளாண் காடுகள் அமைப்பதற்கு உகந்த மரமாகும். மேலும் இதன் தொடர்பாக ஆராய்ச்சி அடிப்படையிலான விவரங்கள் தேவை இருப்பின் வனக்கல்லூரி மற்றும் ஆராய்ச்சி நிலையத்தினை தொடர்பு கொண்டு விவரம் பெறலாம் என தெரிவித்துக் கொள்ளப்படுகிறது.

ஒம்/- க.விஜயா,
வேளாண்மை இணை இயக்குநர்,
தருமபுரி.

நகல். மாவட்ட ஆட்சித்தலைவர் அவர்களுக்கு பணிந்து சமர்ப்பிக்கப்படுகிறது.
நகல். மாவட்ட வருவாய் அலுவலர் அவர்களுக்கு பணிந்து சமர்ப்பிக்கப்படுகிறது.
நகல். வேளாண்மை துணை இயக்குநர் / மாவட்ட ஆட்சியரின் நேர்முக உதவியாளர்(வேளாண்மை), தருமபுரி அவர்களுக்கு தகவலுக்காக அனுப்பப்படுகிறது.

//ஆணைப்படி//

வேளாண்மை அலுவலர்

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

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நீர்வளத்துறை

மாவட்ட ஆட்சியர் அலுவலகம்
15 DEC 2022
தருமபுரி-636705

அனுப்புநர்

பொறி. ச.குமார், பி.இ,
செயற்பொறியாளர், நீ.வ.து
மேல்பெண்ணையாறு வடிநில கோட்டம்,
தருமபுரி-5.

பெறுநர்

மாவட்ட ஆட்சியர்,
தருமபுரி.

க. எண் : 1263/ கோ. கோ. மனுக்கள் குழு / 2022 / வ3 /நாள்: 12.12.2022

அய்யா,

பொருள்: தருமபுரி மாவட்டம் - பாப்பிரெட்டிப்பட்டி வட்டம், வரலட்சமி கிழங்கு அரவை ஆலைக்கு பீணியாற்றிலிருந்து சட்டவிரோதமாக தண்ணீர் எடுப்பது - ஆய்வு அறிக்கை அனுப்புதல் - தொடர்பாக.

பார்வை:
1. திரு.ப.சுரேஷ், த/பெ. பச்சையப்பன் ஒருங்கிணைப்பாளர் பீணி ஆறு பாதுகாப்பு விவசாயிகள் இயக்கம் அலமேலுபுரம் பாப்பிரெட்டிப்பட்டி அவர்களின் சட்டமன்ற பேரவை மனுக்கள் குழுவிலிருந்து பெறப்பட்ட மனு எண். 6988.
2. மாவட்ட ஆட்சியர், தருமபுரி அவர்களின் செயல்முறை ஆணை எண். 0013 / 2022 / த.நா.மா.க. வாரியம் / நாள். 15.11.2022.

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பார்வை 1-ல் கண்ட மனுவில் தருமபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டம், அலமேலுபுரம் கிராமத்தில் செயல்பட்டு வரும் தி/வா. வரலட்சுமி ஸ்டார்ச் இண்டஸ்டிரிஸ் பிரைவேட் லிமிட் தொழிற்சாலையின் கழிவு நீர் பீணியாற்றில் கலப்பதால், மக்களின் சுகாதாரம், மீன்கள் இறப்பு, கால்நடைகள் மற்றும் விவசாயம் பாதிப்பு அடைகிறது. மேலும் பீணியாற்றில் இருந்து சட்ட விரோதமாக தண்ணீர் எடுத்து குட்டையில் சேகரிப்பதாகவும், சீமை கருவேல மரங்கள் வளர்ப்பதால் அப்பகுதி நிலத்தடி நீர் பாதிப்பு அடைவதாகவும், மேலும் பீணியாறு ஆற்றங்கரையினை ஆக்கிரமிப்பு செய்யப்பட்டுள்ளதால் தொழிற்சாலையின் மீது நடவடிக்கை எடுக்க வேண்டி தெரிவிக்கப்பட்டுள்ளது.

தருமபுரி மாவட்டத்திற்கு கடந்த 09.11.2022 அன்று வருகை புரிந்த தமிழ்நாடு சட்டமன்ற பேரவை மனுக்கள் குழு (2021-2023) மேற்கண்ட மனு தொடர்பாக மாவட்ட ஆட்சித்தலைவர் தருமபுரி அவர்களின் தலைமையில் குழு அமைத்து மேற்படி தி/வா. வரலட்சுமி ஸ்டார்ச் இண்டஸ்டிரிஸ் பிரைவேட் லிமிட் ஆலையை ஆய்வு செய்து ஒரு மாத காலத்திற்குள் அறிக்கை சட்டமன்ற பேரவை மனுக்கள் குழுவிற்கு சமர்ப்பிக்குமாறு கோரப்பட்டுள்ளது.

த.பி.பா.,

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

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அதன் பேரில் பார்வை 2-ல் காணும் மாவட்ட ஆட்சியர் தருமபுரி, அவர்களின் செயல்முறை கடிதத்தில் மாவட்ட வருவாய் அலுவலர் தருமபுரி, அவர்களின் தலைமையில் இணை இயக்குநர் வேளாண்மைதுறை தருமபுரி, செயற்பொறியாளர் நீ.வ.து. மேல்பெண்ணையாறு வடிநில கோட்டம் தருமபுரி, செயற்பொறியாளர் நிலநீர்கோட்டம் வேலூர், வருவாய் கோட்டாட்சியர் அரூர், உதவி இயக்குநர் நிலஅளவை தருமபுரி, உதவி இயக்குநர் மீன்வளத்துறை தருமபுரி, துணை இயக்குநர் தொழிலக பாதுகாப்பு மற்றும் சுகாதாரம் தருமபுரி, செயற்பொறியாளர் தமிழ்நாடு குடிநீர் வடிகால் வாரியம் தருமபுரி, மாவட்ட நியமன மற்றும் உணவு பாதுகாப்பு துறை தருமபுரி, மாவட்ட சுற்றுசூழல் பொறியாளர் தமிழ்நாடு மாசுகட்டுப்பாட்டு வாரியம் தருமபுரி அடங்கிய குழு அமைத்து தொழிற்சாலையை ஆய்வு செய்து அறிக்கை சமர்ப்பிக்க உத்திரவிடப்பட்டுள்ளது. இவ்வுத்திரவின் பேரில் இக்குழுவானது 30.11.2022 அன்று தொழிற்சாலையை ஆய்வு செய்யப்பட்டது. அப்போது பின்வரும் விபரங்கள் கண்டறியப்பட்டது.

- கடந்த 1998 முதல் மேற்படி ஆலை இயங்கி வருவதாக தெரிகிறது. இவ்வாலைக்குள் ஆலை பயன்பாட்டிற்கு தேவையான தண்ணீர் எடுக்க ஆலைக்கு சொந்தமாக ஆழ்துளை கிணறு அல்லது திறந்த வெளி கிணறு ஏதும் இருப்பதாக தெரியவில்லை. தி/வா.வரலட்சுமி கிழங்கு அரவை ஆலை வளாகத்திற்குள் பீணியாற்றின் கரையை ஒட்டி சுமார் 160X88மீ, 106X26 மீ பரப்பளவில் குட்டை ஒன்று நீர்வளத்துறை அனுமதியில்லாமல் வெட்டப்பட்டுள்ளது.
- பீணியாற்றிலிருந்து சட்டவிரோதமாக தண்ணீர் எடுத்து ஆலையில் வெட்டப்பட்டுள்ள குட்டையில் குழாய் மூலம் தண்ணீர் நிரப்பப்பட்டு ஆலை பயன்பாட்டிற்கு பயன்படுத்தப்பட்டு வருகிறது.
- ஆற்றின் கரை ஆக்கிரமிப்பு செய்யப்பட்டுள்ளது.
- ஆலையில் இருந்து வெளியேறும் கழிவு நீர் பீணியாற்றில் கலக்குமாறு குழாய் பதிக்கப்பட்டுள்ளது.

துறையின் பரிந்துரை

1. மேற்கூறிய விபரங்களின் படி பீணியாற்றின் கரையை ஒட்டி சுமார் 160X88மீ, 106X26 மீ பரப்பளவில் இத்துறையின் எவ்வித அனுமதியும் இன்றி வெட்டப்பட்டுள்ள குட்டை உடனடியாக மூடப்பட வேண்டும்.
2. ஆலையின் கழிவு நீர் பீணியாற்றில் கலக்கா வண்ணம் மாற்று ஏற்பாடு செய்யப்பட வேண்டும்.

த.பி.பா.,

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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3. அரசு விதிகளின் படி ஒரு தொழிற்சாலை இயங்க தேவையான தண்ணீரில் 50% தொழிற்சாலையில் சொந்தமாக ஆழ்துளை கிணறு / திறந்த வெளி கிணறு அமைத்து பயன்படுத்தி கொள்ள வேண்டும்.
4. அரசின் நீராதாரங்களிலிருந்து தண்ணீர் எடுக்க மாவட்ட ஆட்சியர் அவர்களின் ஒத்திசைவு பெற்று, அரசின் ஆணை பெற்று தண்ணீர் எடுக்க உரிய கட்டணம் செலுத்தி நீர்வளத்துறையினருடன் உடன்படிக்கை மேற்கொள்ளப்பட வேண்டும்.
5. இவ்வாறு ஆற்றிலிருந்து தண்ணீர் எடுக்க தனியாக மின் இணைப்பு, தண்ணீர் எடுக்கப்படும் அளவை கண்காணிக்க தனியாக ஒரு அளவு கோலும் பொருத்தப்பட வேண்டும்.
6. அரசின் அனுமதி பெறாமல் சட்ட விரோதமாக தண்ணீர் எடுத்தால் அரசு நிர்ணயிக்கும் கட்டணத்தை விட 20 மடங்கு அபராதமாக செலுத்த வேண்டும் என பரிந்துறை செய்யப்படுகிறது.

5/12/22

செயற்பொறியாளர், நீவது,
மேல்பெண்ணையாறு வடிநில கோட்டம், தருமபுரி.5

5/12/22

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

WATER RESOURCES DEPARTMENT

(20)

From
Thiru. E.Senthil Kumar.B.E,
Executive Engineer,
Ground Water Division,
Water Resources Department,
Vellore-6

To
District Revenue Officer,
Collectorate,
Dharmapuri-5

Lr.No.J.D.O/F-NOC-Pollution/ 977 /Vlr/2022 Dated: 29.12 .2022.

Sir,

Sub: Field inspection report of Ground Water Division, Vellore conducted along with the joint committee at Sri Varalakshmi Starch Industries in Alamelupuram village, Pappireddipatti taluk,Dharmapuri district submitted-Regarding.

Ref: 1. Dharmapuri District Collector proceeding. No .0010/2022/Tamil Nadu Pollution Control Board. Dated: 18.11.2022.

2. Legislative petition committee Petition no: 6988. Of Mr.P.Suresh S/o pachaiyappan, coordinator, organizer of Peniar safety, Alamelupuram, Pappireddipatti, Dharmapuri.

3. Tamilnadu legislative petition committee inspection in Dharmapuri dated: 09.11.2022.

4. thiru.P.Suresh S/o Pachaiyappan petition to the Revenue Divisional Officer, Harur during the farmer grievance cell on 14.11.2022.

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The legislative petition committee advised the district administration to form a committee under the chairmanship of District Revenue Officer, Dharmapuri district comprising various department officials to inspect the site and to submit the report as cited in Ref 1.

The Executive Engineer Ground water Division, Vellore was also a member of the committee to ascertain the ground water pollution aspect. Based on that a field inspection was conducted by the ground water division, Vellore officials headed by Executive Engineer at Sri Varalakshmi Starch Industries in Alamelupuram Village of Pappireddipatti taluk Dharmapuri district.

The report is prepared based on the inspection conducted on 30.11.2022 and is enclosed here for your kind reference

Sd/
Executive Engineer,W.R.D.,
Ground water Division, Vellore -6.

Enclosure: Field Inspection Report

Copy to District Environmental Engineer,pollution control board,Dharmapuri for information

29.12.22
Executive Engineer, W.R.D.,
Ground water Division, Vellore -6.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI
29.12.2022

FIELD INSPECTION REPORT OF GROUND WATER DIVISION, VELLORE CONDUCTED ALONG WITH THE JOINT COMMITTEE AT SRI VARALAKSHMI STARCH INDUSTRIES IN ALAMELUPURAM VILLAGE, PAPPIREDDIPATTI TALUK, DHARMAPURI DISTRICT.

(21)

INTRODUCTION:

Thiru. P.Suresh, Coordinator of farmer's organization for the safety of Penniar River of Alamelupuram and Pappireddipatti villages in Papireddipatti taluk, Dharmapuri district, filed petition to the Revenue Divisional Office, Harur during the farmer grievance meeting held on 04.11.2022. The petition states that effluents from M/s Varalakshmi Starch Industries located in (survey no 75PT, 77PT, 78PT, 168PT,) of Pappireddipatti village and (121PT, 125PT, 128-132PT, 138PT) of Alamelupuram village of Pappireddipatty taluk were discharged were in the Penniar river, due to which the hygiene of the people, fish, cattle, farming, and quality of groundwater are affected. The petitioner also submitted the above to the legislative petition committee during the visit to Dharmapuri district. The legislative committee forwarded the petition to the District Administration to initiate immediate action. The District authority has formed a committee under the chairmanship of District Revenue Officer of Dharmapuri district comprising various department officials to inspect the site and to submit the report.

A District level Committee has been formed and the members of the committee are as follows.

District revenue officer	**Head of the committee**
Joint Director, Agriculture Department, Dharmapuri.	Member
Executive Engineer, Upper Pennaiar Division, Water Resource Department, Dharmapuri.	Member
Executive Engineer, Ground Water Division, Water Resource Department, Vellore.	Member
Revenue Inspector, Revenue Department, Harur.	Member
Assistant Director, Surveyor and Land Records, Dharmapuri.	Member
Assistant Director, Fisheries Department, Dharmapuri	Member
Deputy Director, Industrial Safety Department, Dharmapuri.	Member
Executive Engineer, TWAD, Dharmapuri.	Member

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Food Safety Department, Dharmapuri.	Member
District Environmental Engineer, Tamilnadu Pollution Control Board, Dharmapuri.	Member Secretary
Deputy Director, Public Health Department, Dharmapuri.	Member

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A preliminary meeting has been arranged with the members of the committee on 16.11.2022 evening around 4.30 pm under the guidance of the District Collector, headed by District Revenue Officer. The District Revenue Officer along with the committee members planned to conduct a field inspection on 30.11.2022 at Sri Varalakshmi starch industries and outside the premises of the industry.

In general, Sago and starch production from the tapioca root crop is one of the major food industries in the western districts of Tamil Nadu. There is nearly about 1000 sago and starch processing factories operating in the above areas of Tamil Nadu, These industries release large amount of waste water containing organic and inorganic solid wastes. This waste water commonly referred as effluent which has obnoxious odour, irritating to skin, lower pH, it affects the health of the soil, natural ecosystem, animals, plants and human beings.

GEOLOGY AND HYDROGEOLOGY OF THE AREA:

The overall geological formations of the area falls mainly to Archaean and Proterozoic age with rocks belonging to Khondalite Group (Garnet Sillimanite gneiss), Charnockite Group of rocks, Migmatite Complex, Sathyamangalam Group of rocks (fuchsite quartzite, sillimanite mica schist and amphibolites), Bhavani Group of rocks(fissile hornblende-biotite gneiss, granitoid gneiss and pink migmatite) and Kolar Alkaline rocks. The lithology of the area is hard crystalline rocks overlained by fractures and jointed rock followed by regoliths. The fractured and jointed rock acts as an aquifer. Ground water level ranges from 4.41 metres to 19.07 metres during Premonsoon and 2.94 metres to 9.47 metres during Post monsoon.

The area contains different soil categories, including brown loamy soil, black soil, colluvium, and alluvium. The average annual precipitation of the study region is 840 mm in which major rainfall occurs during the monsoon season (June to December).

FIELD INSPECTION AND OBSERVATION:

The industry M/s Varalakshmi Starch Industries located in survey no 75PT, 77PT, 78PT, 168PT, of Pappireddipatti village and 121PT, 125PT, 128-132PT, 138PT of Alamelupuram village, Pappireddipatti Taluk is functioning for past 22 years. The referred Pappireddipatti village falls under Pappireddipatti Firka and it is categorized as Semi Critical category, as per the G.O (Ms).No.155/ Public Works (R1) Department

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/Dated:28.10.2021. The Department members along with the joint committee [illegible]

30.11.2022 to ascertain the exact functioning and the prevailing situation in the premises. (23)

The industry produces starches and modified starches from tapioca and also produces the following by-products like tapioca thippi(dry), maize germ dry, maize gluten dry, maize husk(Fibre dry), with a production capacity of more than 10000 metric tons/year. The Industry discharge 4.3KLD sewage and 500.1 KLD of trade effluents into the industry's own land covered by trees.

This Department focuses on the following aspects pertaining to groundwater issues during inspection of the site

1. Whether the industry uses groundwater for its industrial purpose or how the industry met out its water requirement

2. What are all the ground water abstraction (Bore well/Open well) structures used for extraction

3. Whether the industry obtained No objection certificate for extraction of Groundwater or whether obtained permission for usage of surface water,

4. Whether Groundwater in the near by village in the open well/Bore wells are polluted or not

5. Whether groundwater level in the adjacent areas has been declined or not

OBSERVATIONS:

Points to Focus	Field status/condition
1.Whether the industry uses groundwater for its industrial purpose or how the industry met out its water requirement	The Industry does not use ground water for their industrial purpose. Water is pumped from the pond which is located in the premises, It has been claimed by the industry that the water stored in the pond is harvested from rain. The pond covers an area of around 14702.98m^2.
2. What are all the ground water abstraction(Bore well/Open well) structures used for extraction	There are No ground water abstraction structures available with in the premises in our observation.
3. whether the industry obtained No objection certificate for extraction of Groundwater or whether obtained	Does not arise. The industry hasn't obtained any permission for the

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permission for usage of surface water;	withdrawal of surface water from the pond; (24)
4. Whether Groundwater in the nearby village in the open well/Bore wells are polluted or not	To ascertain the groundwater pollution in the nearby village open wells, samples were collected according to Geological and hydrogeological condition of the area from eight open wells
5.Whether groundwater level in the adjacent areas has been declined or not	Water levels were observed in the nearest open wells and also in the eight referred open wells

ACTION TAKEN:

A bunch of Karuvelamaram is seen at the North Eastern side of the industry, where the effluents of the industry has been discharged and stored in the land. The effect of these effluents with groundwater need to be ascertained. Hence, the samples of ground water were collected inside and outside the premises, and the details are as follows

Table 1

S.no	Date of Sample collection	Lab No	Well location and Owner (O.W=Open well)	Latitude	Longitude	Water level during inspection
1	30.11.2022(F.N)	C-1003	Inside the industry premises/ harvesting pond	11°53'47.67''	78°22'29.07''	4.3m
2	30.11.2022(F.N)	C-1004	Inside the industry premises/small stream near effluent discharge	11°53'54.33''	78°22'40.09''	N.A
3	30.11.2022(F.N)	C-1005	Inside the industry premises/open well	11°53'53.94''	78°22'43.54''	3.6
4	30.11.2022(A.N)	C-1006	Outside the premises/Kannayiram(O.W)	11°54'07.26''	78°22'44.97''	2.75
5	30.11.2022(A.N)	C-1007	Outside the premises/Venkatesan(O.W)	11°54'09.83''	78°22'43.58''	3.6
6	30.11.2022(A.N)	C-1008	Outside the premises/Nagaraj(O.W)	11°54'05.11''	78°22'44.29''	4.35
7	30.11.2022(A.N)	C-1009	Outside the premises/Mohan(O.W)	11°54'04.60''	78°22'29.74''	4.1

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	30.11.2022(A.N)	C-1010	Outside the premises/Mani(O.W)	11°34'06.32"	78°22'35.81"	5.5

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Table 2

The distance of the sample locations from the rain water harvesting pond as follows

Sample water collected location	Approximate Distance from the harvesting pond
Harvesting pond	**0m**
Effluent stream	**392m**
Kannayiram(O.W)	**775m**
open well inside premises	**497m**
Nagarajan well	**709m**
Venkatesan well	**814m**
effleuents in Karuvelamaram field	**375 m**
Mani well	**622m**

RESULTS AND DISCUSSION:

Qualitative results:

Ground water samples were collected and sent to Geochemical laboratory, Office of Assistant Director (Geochemistry), Water Resources Department, Tharamani, Chennai for analysis and the results were obtained as follows,

Sl.No	Particulars	Unit	Drinking water standard(MAX)	C-1003	C-1004	C-1005	C-1006	C-1007	C-1008	C-1009	C-1010
1	Electrical conductivity	uS/cm @25	3000	1190	4550	10530	10520	6900	11570	3030	4870
2	pH		6.5-8.5	8	7.9	7.5	7.6	7.6	7.5	8.1	7.9
3	Calcium	Mg/L	200	62	24	120	280	20	320	44	172
4	Magnesium	"	100	49	219	657	705	389	632	170	202
5	Sodium	"	?	87	437	633	518	633	1081	223	308
6	Potassium	"	?	7	270	7	2	6	3	1	2

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8	Carbonate	"	?	0	0	0	0	0	0	0	0
9	Sulfate	"	400	46	173	72	72	19	120	48	58
10	Chloride	"	1000	149	865	2694	2978	1808	3616	475	943
11	Nitrate	"	45	19	122	23	74	83	58	76	81
12	Fluoride	"	1.5	0.83	0.77	1	1.4	1.41	0.01	1.5	1.3
13	Total dissolved solids(TDS)	"	2000	591	2568	4512	4871	3194	6120	1353	2057
14	Total hardness as CaCO3(TH)	"	600	355	960	3000	3600	1650	3400	810	1260
15	Total alkalinity as CaCO3	"	600	280	750	500	395	385	475	515	475

It is observed from the sample analysis, overall samples collected in the wells, the parameters like chloride, Nitrate, total dissolved Solids and total hardness shows higher values than normal.

This Department has two observation wells at the study area i.e. in the Pappireddipatti Firka to monitor the ground water level and quality of ground water of the area.

The department collects ground water samples in the month of January and July of every year to assess the quality of the ground water of the area from the above said wells, the average water chemistry for the past 10 years in the observation well located in Pappireddipatti Firka are given below.

TDS	NO2+NO3	Ca	Mg	Na	K	Cl	SO4	CO3	HCO3	F	pH_	EC
871.9661	19.5004	74.0644	59.2330	145.6	5.4898	208.16	125.1	5.3624	320.12	0.9337	8.0508	1528.8

Quantitative results:

The Water Resources Department has two observation wells at the study area i.e in the Pappireddipatti Firka to monitor the ground water level and quality of the area. They are monitored every month and the details are given below.

A) Observations open well located 1.3 Km (53031) north of the referred industry shows no declination.

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6.87	1.97	2.51	2.76	5.98	5.09	2.20	4.56	4.82	5.62	3.54	1.87	0.99

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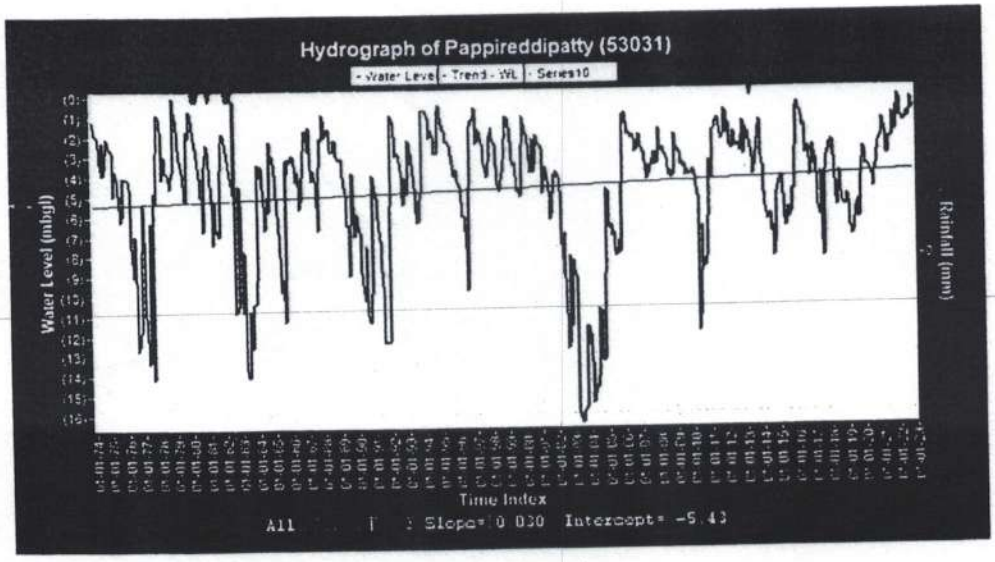
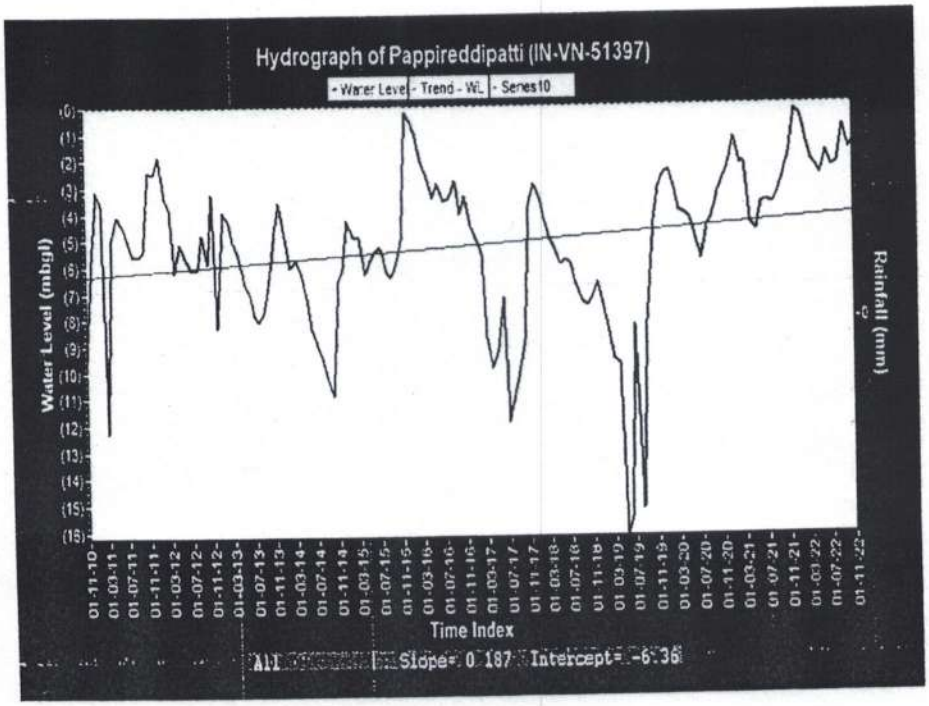


B) Observation bore well located 2.11km (INV N-51397) North West of the referred industry also shows no decline

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
4.91	4.95	5.89	7.55	5.05	2.86	6.91	5.94	9.07	3.97	2.82	1.71



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Tamil Nadu Pollution Control Board
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CONCLUSION:

The chemical analysis shows some parameters are higher in values than normal, The Water Resources Department has two observation wells at the study area itself i.e. in Pappireddipatti Firka to monitor the ground water quality of the area. The last 10 year average value of the different parameters shows no drastic changes. **A detailed and systematic chemical study for a period of 3 to 5 years only will reveal the difference in changes of the quality. The water level trend of the observation wells of this department reveals there is no decline in the water level.**

This wing of Water Resources Department suggests the industry to follow the below mentioned conditions.

1. **The stored water in the pond must not be extracted directly to the industrial use since, the water is meant to recharge the Aquifers (Water bearing zones) to maintain the hydrogeological conditions of the area.**
2. **The harvested water can be extracted through open wells or through borewells only .From this industrial usage of water can be quantified.**
3. **Proper no objection certificate shall be obtained from the competent authority ie The Chief Engineer, SG&SWRDC, WRD, Tharamani, Chennai-113 for the ground water extraction.**
4. **The industry is instructed to adopt suitable and efficient effluent treatment system for their rejected water to check the groundwater pollution.**

ENCLOSURES:

1.) Field photos showing water samples collected at various sites.

2.) Satellite image showing the location of samples collected areas inside and outside the industry.

28/12/22
Assistant Geologist, WRD,
Ground Water sub Division,
Dharmapuri-05.

27/12/22
Assistant Director (Geology),
Ground Water Sub Division,
Vellore-06.

29/12/22
Executive Engineer, WRD,
Ground water Division,
Vellore-06.

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FIGURE1: WATER SAMPLE IS COLLECTED FROM THE EFFLEUNT STREAM

FIGURE 2: WATER SAMPLES COLLECTED FROM THE HARVESTING POND IN THE INDUSTRY PREMISES.

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FIGURE 3: OPEN WELL LOCATED INSIDE THE INDUSTRY PREMISES.

FIGURE 4) GROUND WATER SAMPLE IS COLLECTED FROM M.R NAGARAJ WELL.

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FIGURE 5) EFFLUENTS FILLED IN THE KARUVELAMARAM FIELD.

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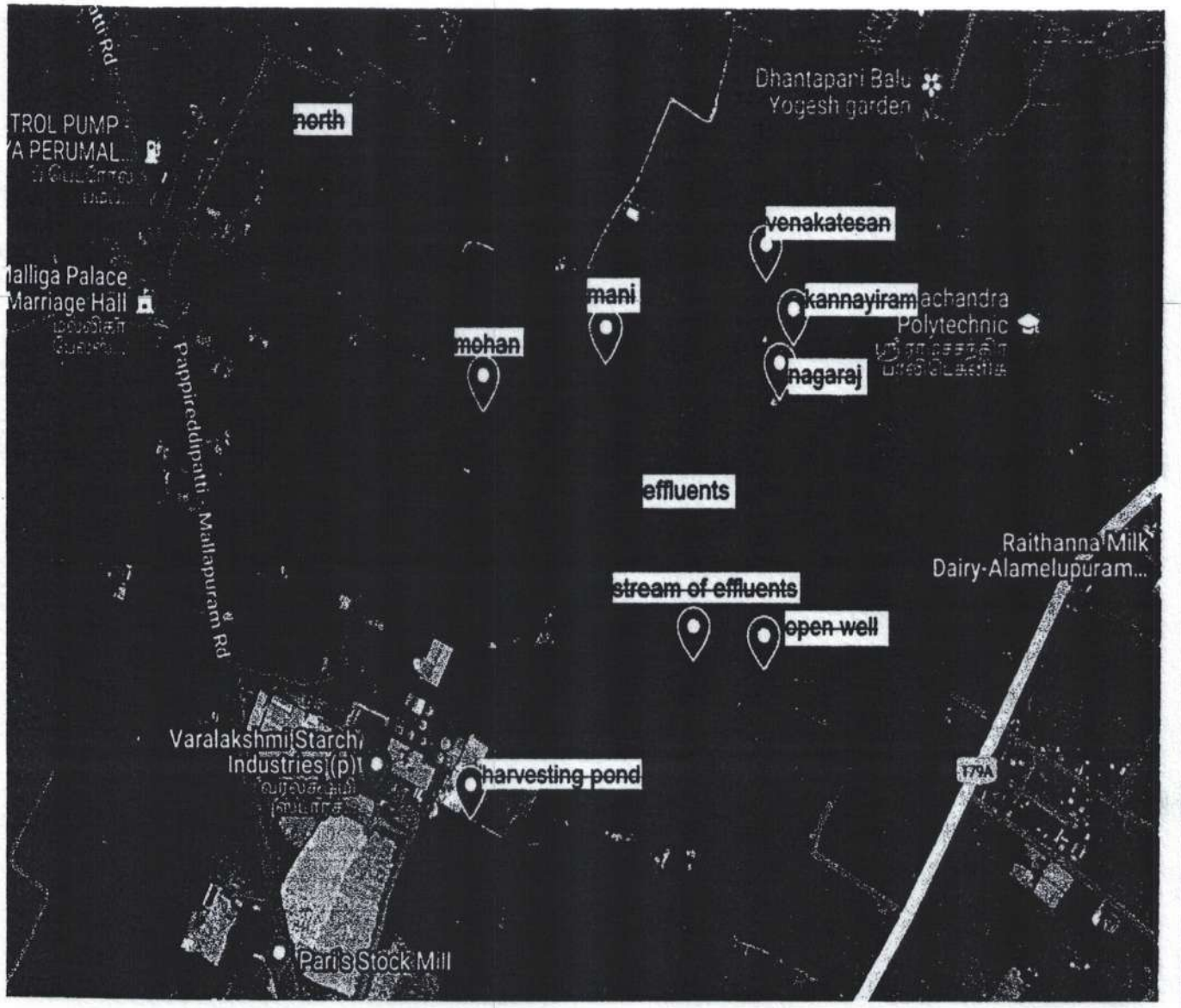
Dharmapuri.



SATELLITE IMAGE SHOWING THE LOCATION OF SAMPLES COLLECTED AREAS INSIDE AND OUTSIDE THE INDUSTRY.

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Tamil Nadu Pollution Control Board
Dharmapuri.

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TAMILNADU POLLUTION CONTROL BOARD

From
Er.S.Sivaranjani, B.Tech., M.E.,
District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
Adiyamankottai-Hosur byepass Road,
A.Reddihalli Village,
Dharmapuri -636 809

To
The District Revenue Officer,
District Collectorate,
Dharmapuri District.

Lr No : DEE/TNPCB/DMP/ F.DMP0013//OL/2021 Dated: 30.12.2022

Sir,

Sub: O/o. DEE-TNPCB – DMP - **M/s. VARALAKSHMI STARCH INDUSTRIES PVT. LTD , S.F.No. 75PT, 77PT,78PT,168PT OF PAPPIREDDIPATTI VILLAGE & 121PT, 125PT,128-132PT, 138PT OF ALAMELUPURAM VILLAGE, PAPPIREDDIPATTI TALUK, DHARMAPURI DISTRICT–** Joint inspection report submitted - Reg.

Ref: 1.Complaint petition filed by Thiru. Suresh before the Hon'ble Legislative Assembly's Petition Committee

2. District Level Committee formed vide Procd dated 18.11.2022

3. Joint inspection of the committee on 30.11.2022

****

With reference to the above, I submit to inform that the unit M/s. VARALAKSHMI STARCH INDUSTRIES PVT. LTD , S.F.No. 75PT, 77PT,78PT,168PT OF PAPPIREDDIPATTI VILLAGE & 121PT, 125PT,128-132PT, 138PT OF ALAMELUPURAM VILLAGE, PAPPIREDDIPATTI TALUK, DHARMAPURI DISTRICT is an existing unit and has obtained consent of Tamil Nadu Pollution Control Board under Orange Large Category (No. 2049 – Manufacture of starch / sago) and under Water (Prevention and Control of Pollution) Act, 1974 as amended and Air (Prevention and Control of Pollution) Act, 1981 to manufacture the following products and By products

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S.No	Name of the product manufactured	Consented quantity
Main Products		
1.	STARCHES & MODIFIED STARCHES	6500.000 T/M
2.	SAGO & PAPPADS	5000.000 T/M
By Products		
3.	TAPIOCA THIPPI (DRY)	2000 T/M
4.	MAIZE GERM DRY	900 T/M
5.	MAIZE GLUTEN DRY	675 T/M
6.	MAIZE HUSK (FIBRE DRY)	1460 T/M
7.	GENERATION OF POWER	1975.68 MW/M

The unit is permitted to discharge 4.3 KLD of sewage on industry's own trees grown land and to discharge 500.1 KLD of trade effluent on industry's own trees grown land, the unit has 15.41 Hectares (38 acres) of Green belt area, where seemai karuvelam trees are grown. The standards prescribed for discharge of trade effluent is inland surface water standards and the river Peeniyaru is running adjacent to the unit

Consent issued to the unit was valid upto 31.03.2021 and the validity has been further extended upto 30.11.2021 due to COVID outbreak, however the unit field application seeking renewal of consent of the Board vide application no. 38751771 dated 20.04.2021 and the same was returned to the unit seeking certain additional particulars.

Again, the unit has filed another application seeking renewal of consent of the Board vide application no. 41395491 dated 09.10.2021 and the application filed was returned to the unit on 18.10.2021, since the Report of Analysis (ROA) of the samples collected on 29.01.2021 reveals that the parameters TSS, BOD and COD exceeds the standards prescribed by the Board and ROA of the samples collected on 11.03.2021 reveals that the parameters TSS, TDS, BOD and COD exceeds the standards prescribed by the Board. The unit was also requested to take immediate steps to improve the performance of ETP and send a detailed action taken report along with photographs and to resubmit the application

Whereas the unit again resubmitted the application on **16.11.2021** and since the ROA of the samples collected by TNPCB on 13.11.2021 was awaited and the compliance of conditions furnished by the unit was found to be incomplete, more specifically the unit has not furnished the status of compliance of the following conditions mentioned in the Consent to Operate issued with validity upto 31.03.2021 (further extended upto 30.11.2021)

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1. **The unit shall take steps to remove the seema karuvelam trees and shall develop green belt by planting native species like Vilvam, Agal, Asogam, Puli, Tekku etc (Native species) within the premises.**
2. **The unit shall apply and obtain authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for generating used oil from the Diesel generators'**

the application filed was returned to the unit on **17.11.2021** and the unit was addressed in this regard vide T.O. letter no. F. DMP0031/ DEE/TNPCB/DMP/OL/2021 dated **17.11.2021.**

Meanwhile, the unit vide its letter dated **20.11.2021** had addressed the Chairman, TNPCB, Chennai requesting to waiver certain conditions and requested for renewal of consent. Subsequently, based on the unit's request made, the Board vide Memo dated **10.12.2021** has requested the DEE, Dharmapuri to consider the unit's representation considering the following points

1. The DEE shall obtain necessary opinion from Agriculture Department on removal of Seemai Karuvelam Trees in 49 Acres of land owned by the unit or utilization of treated effluent for the growth of Seemai Karuvelam Trees.
2. DEE shall monitor the performance of ETP on continuous basis by collecting monthly samples (during season) and analyze through Board's lab.
3. The ground water quality shall also be monitored in the nearby wells where the trade effluent is used for irrigation (Seemai Karuvelam Tree Cultivation area). If any exceedance noticed necessary action may be taken against the unit

Meanwhile, as per the instructions received from the District Collector, Dharmapuri on 15.12.2021 to inspect the unit and furnish the report. Hence the unit was inspected on 15.12.2021 and a detailed report was submitted to the District Collector vide T.O. letter dated 16.12.2021. Meanwhile, a letter dated 16.12.2021 has been addressed to the Agriculture Department, requesting their opinion on development / removal of Seemai Karuvelam Trees. Also, the unit has been addressed vide T.O. letter dated 16.12.2021 to rectify the shortfalls observed during inspection . Also, on perusal of the Inspection report submitted on 16.12.2021, the District Collector vide noting dated 20.12.2021 has instructed to furnish the Report of Agriculture Department.

The unit was again inspected on 28.01.2022 and during inspection it was observed that the unit has not taken any steps to comply with the instructions issued vide T.O. letter dated 16.12.2021. Routine sample collections were made from the ETP, Ground water

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samples. The ROA of the Ground water samples (Five samples) collected from the nearby wells, situated, outside the unit's premises reveals that the parameters Turbidity (5/5), TDS (5/5), Cl (4/5), Mg (5/5), F (2/5), Total Ammonical Nitrogen (5/5), Ca (4/5) and Alkalinity (5/5) exceeds the Drinking Water – Specification (IS 10500:2012).

The unit again resubmitted the application seeking renewal of consent of the Board on **29.01.2022** and the application filed by the unit was returned on 04.02.2022, since the ROA of the samples collected on 13.11.2021, 09.12.2021 and 15.12.2021 reveals that the parameters exceeds the standards prescribed by the Board and a detailed letter on the above facts, has been submitted to the TNPC Board vide Lr No: DEE/TNPCB/DMP/ STARCH/OL/2021 Dated: 03.02.2022 Further, the Tamil Nadu Agricultural University has furnished the Joint Inspection Report vide its letter dated **02.02.2022**

Meanwhile, the unit has furnished a reply letter dated 24.02.2022 for the instructions issued to the unit on 16.12.2021

Further, complaint petitions were received from Thiru.Suresh on 10.03.2022 and 11.03.2022 through District Collectorate against M/s. Varalakshmi Starch industries for taping river water from Peeniyaru and disposal of untreated effluent into the river Peeniyaru.

The compliant was inspected on 16.03.2022 and during inspection it was observed that there was no flow of water in river Peeinyaru and only stagnation of river water was observed. Also, the trade effluent generated from the unit's activity was treated in the Effluent Treatment Plant and the treated effluent was utilized for development of Seemai Karuvelam Trees. There is no direct discharge of trade effluent into the river, however there is possibility of seepage of trade effluent into the river. A reply letter dated 21.03.2022 has been sent to the complainant, in this regard.

Again a complaint petition was received from Thiru Suresh through CM cell and reply has been sent to the complainant vide T.O. letter dated 25.03.2022

Subsequently, the Board vide Proc No. TNPCB/T2/F.025102/DMP/OL/Directions/W/2021 Dated 18.04.2022 has issued the following Directions were issued under Section 33A of the Water (P&CP) Act, 1974 to the unit for compliance

1. The unit shall take immediate steps to arrest the pipe line leakages in the process area.

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Tamil Nadu Pollution Control Board
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2. The unit shall immediately take steps improve the performance of the Effluent Treatment Plant, also operate and maintain the Effluent Treatment Plant efficiently and continuously so as to satisfy the standards prescribed by the Board, since the Report of Analysis of the ETP outlet samples (Three samples) collected during the month of November 2021 and December 2021 reveals that the parameters TSS (1/3), TDS (1/3), BOD (2/3) and COD (3/3) exceeds the standards prescribed by the Board.
3. Further, the unit shall immediately take steps to uniformly distribute the treated effluent without any stagnation, in the area meant for irrigation / green belt development area, since the report of analysis of ground water samples (Five samples) collected around the units premises reveals that the parameters Turbidity (5/5), TDS (5/5), Cl (4/5), Mg (5/5), F (2/5), Total Ammonical Nitrogen (5/5), Ca (4/5) and Alkalinity (5/5) exceeds the Drinking Water – Specification (IS 10500:2012), as stagnation of effluent causes seepage into ground water.

4. **As per the opinion of Agriculture Department,**
   a. *The unit shall plant Casuarina short rotation clones like TNAU Casuarina MTP 1 and TNAU Casuarina MTP 2 due to its fast growth, multiple utility, nitrogen fixing ability and amenability towards all types of agro and farm forestry systems. The Eucalyptus grandis and Melia dubia are all suitable for planting.*
   b. *Though Prosopis juliflora is a drought tolerant hardy plant which extracts more water it is considered an invasive tree species. As the invaded area is large and labour intensive, planting the other above said tree species in phased manner can be carried out for efficient utilization of effluent water.*
5. The unit shall take necessary steps to treat the stagnated effluent mixed with rain water in the proposed anaerobic pit immediately and shall ensure that there is no stagnation of effluent in the incomplete pits.
6. The unit shall improve the aesthetic conditions of the Effluent Treatment Plant and to dispose the sludge / scums into Sludge Drying Beds only, for further treatment.
7. The unit shall carry out water and waste water audit so as to reduce the water consumption / waste water generation by engaging reputed institutions within a weeks time.
8. The unit shall file application seeking authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (for generating used oil from DG sets), along with valid consent of the Board.

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The unit vide its letter dated 16.05.2022 has furnished reply letter for the Directions issued to the unit. The unit was inspected on 23.05.2022 and a detailed report has been submitted to the Board vide T.O letter dated 24.05.2022. Since the unit has not complied with the above said Directions, a joint inspection has been carried out by the Joint Chief Environmental Engineer (Monitoring), Vellore region along with the officials of O/o/DEE, TNPCB, Dharmapuri and personal hearing, a report has been submitted to the Board.

Subsequently, the following Directions have been issued to the unit vide TNPC Board's Proc No. TNPCB/T2/F.025102/Directions/Water/2022 dated 17.10.2022

1. The Units Reply latter dated 19.10.2022The unit has to furnish an action plan with time schedule for revamping the existing ETP provided so as to satisfy the treated effluent standards prescribed by the Board and remove the seemai karuvelam trees already planted by them and replacing the same by planting the native species as recommended by the Agriculture Department along with proposal for safe disposal of entire quantity of treated effluent within 15 days.
2. The unit shall ensure that the treated effluent is uniformly dispersed for green belt development without any stagnation and also shall not discharge any treated / untreated trade effluent into the nearby water bodies
3. The units has to furnish the report on Water and Waste water audit and ground water quantity study carried out by reputed institution like Anna University, Chennai / IIT Chennai within three months
4. The unit has to cover the area of the storage of wet Tapioca Thippi by providing a shed within 3 months
5. The unit has to provide proper storm water drain to restrain the rain water mixing with trade effluent generated from the process area within three months.
6. The unit shall provide compound wall around the green belt area and the ETP area within nine months
7. In order to ensure for the compliance of the above Directions 1 to 6, the unit shall furnish a Bank Guarantee for Rs 50 Lakhs with validity for two years within week's time to the TNPCB, Chennai.

Meanwhile a compliant petition dated 02.09.2022 from Thiru. Suresh has been received through the Revenue Divisional Officer, Harur and through Executive Officer, Pappireddipatti Town Panchayat was received in this office regarding tapping of river

water by M/s. Varalakshmi Starch Industries from river peeniyaru and discharge of untreated effluent into river Peeniyaru. A reply letter briefing the action taken by the TNPCB against the unit has been sent to the complainant vide T.O letter dated 30.09.2022 (39)

Subsequently, the unit vide its letter dated 19.10.2022 has requested certain details pertaining the above said Directions and a reply has been furnished to the unit vide T.O. letter dated 22.10.2022.

Also, the unit was again instructed by the Board vide letter dated 27.10.2022 to comply with the Directions issued within the prescribed time limit and the status report on compliance to be communicated on weekly basis.

Further, a complaint petition was also received against the operation of the unit vide TNPC Board's Proc No. TNPCB/T2/F.025102/DMP/OL/Directions/W/2021 Dated 18.04.2022 from Thiru. Krishnamoorthy against M/s. Varalakshmi Starch Industries and hence the unit was inspected on 03.11.2022 and report has been submitted to the Board vide T.O.letter dated 03.11.2022.

Again, a compliant petition has been filed by Thiru.Suresh in the Hon'ble Legislative Assembly's Petition Committee against the unit and the Petition Committee visit to Dharmapuri District was on 09.11.2022 Meanwhile the unit has furnished reply letter to the Board vide letter dated 28.10.2022 and the Board vide memo dated 04.11.2022 has requested the DEE/Dharmapuri to furnish remarks on the unit's letter and the remarks has been submitted to the Board vide T.O. letter dated 05.11.2022

Subsequently, order for closure of the unit and disconnection of power supply to the unit was issued vide Proceeding No.:TNPCB/T2/F.025102/DMP/Closure/Water/2022 dt:08.11.2022. The power supply to the unit was disconnected on 08.11.2022 at 05.00 P.M by the Assistant Executive Engineer, TNEB, Pappireddipatti.

Further, during the Hon'ble Legislative Assembly's Petition Committee meeting conducted on 09.11.2022, Compliant Petition from Thiru. Suresh , vide Petition No. 6988: against M/s. Varalakshmi Starch industries was reviewed and complainant alleged before the committee that the unit is in operation even after disconnection of power supply. Also, the Hon'ble Legislative Assembly's Petition Committee directed the allied

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

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departments to inspect the unit considering the allegations made by the complainant and submit report to the petition committee, within a month's time.

Subsequently, the unit was inspected on 10.11.2022 and during inspection it was observed that the unit M/s. Varalakshmi Starch Industries Pvt Ltd., was not in operation and the unit is not carrying out any production activity.

Further, as directed by the Hon'ble Legislative Assembly's Petition Committee, District Level Committee has been formed vide Procd dated 18.11.2022 under the Chairmanship of the District Revenue Officer.The first meeting of the committee was held on 16.11.2022 and based on the deliberations, the committee inspected the unit on 30.11.2022.

Meanwhile, the unit has made several representations to the Board vide letters dated 08.11.2022, 9.11.2022, 14.11.2022, 17.11.2022 and 21.12.2022 . Subsequently, the DEE has been requested to furnish the remarks on the units representations vide Board's memo dated 17.11.2022 and the remarks has been submitted to the Board vide letter dated 01.12.2022 including the following observations made on 30.11.2022

1. The unit has not complied with the directions issued vide Proc dated 18.04.2022 and 17.10.2022.
2. The unit has not furnished any action plan with concrete time schedule for revamping / completion of the ETP with additional components. During inspection the construction works for installing the additional components for the ETP was under progress. The ROA of the treated effluent samples collected in November2021, December 2021, January 2022 – June 2022 reveals that the parameters TSS, BOD and COD exceeds the inland surface water standards prescribed by the Board. The ROA of the samples collected on 04.08.2022 and 20.09.2022 (during the non crushing of tapioca with lean trade effluent generation) were within the inland surface standards prescribed by the Board.
3. The unit has reported that the existing coverage of the Seemai Karuvelam trees extends to an area of around 30 acres, we propose to complete the removal of the entire Seemai Karuvelam trees and replacement with other Native trees progressively within a span of around 5 years' time.
4. The unit has furnished the copy of correspondences made between the unit and Anna University to furnish adequacy report for the existing Effluent Treatment Plant only. The unit has not furnished any action plan with time schedule to carry

District Environmental Engineer
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out Water and Waste water audit and ground water quantity study through reputed institution like Anna University

(41)

5. During inspection of the unit on 30.11.2022 it was observed that the unit has not provided shed cover to the Thippy storage area. The unit has reported that roofing truss and sheet laying works shall be completed within 3 or 4 months which might get prolonged due to any unforeseen continuous rains preventing continuous work.
6. The unit has removed Seemai Karuvelam Trees of around 7 acres (not from ETP treated effluent disposal area) and is used as drying yard for drying thippi, by the unit.
7. The steps taken by the unit to restrain the mixing of rain water with trade effluent has not been furnished.
8. The unit has not furnished any action plan for providing compound wall to the Green Belt / ETP area
9. The unit has requested to waive off the Bank Guarantee of Rs 5 Lakhs.

Based on the remarks furnished, TNPC Board has formed an Inspection committee vide memo dated 07.12.2022 to inspect the unit M/s. Varalakshmi Starch Industries Pvt Ltd., on various aspects as stated in the said Board's memo.

Meanwhile, the unit has filed appeal vide Appeal No. 77 of 2022 before the Hon'ble National Green Tribunal, Southern Zone, Chennai and obtained interim stay on the TNPCB order dated 08.11.2022, subsequently TNEB power has been restored to the unit on 12.12.2022 by TNEB. The next hearing of the case filed by unit in the Hon'ble National Green Tribunal is on 05.01.2023

Further it is submitted that, the committee of TNPC Board has inspected the unit on 27.12.2022 and counter affidavit will be filed by the TNPC Board through Board Standing Counsel before the Hon'ble National Green Tribunal before 05.01.2023.

This is submitted for favour of kind information and further action please.

Encl: As above

30/12/2022

District Environmental Engineer,(a)c)
Tamil Nadu Pollution Control Board,
Dharmapuri

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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நீர்வளத்துறை

அனுப்பதல்:-

பொறி, A.P.கிருபா, பி.இ.,
உதவிப்பொறியாளர்.
நீர்வளத்துறை,
பாசனப்பிரிவு
வாணியாறு அணை
பாப்பிரெட்டிபட்டி

பெறுதல்:-

திரு . சுரேஷ்
த/பெ பச்சையப்பன்
ஆறுபாதுகாப்பு விவசாயிகள் இயக்கம்
அலமேலுபுரம் அஞ்சல்
பாப்பிரெட்டிப்பட்டி வட்டம்
தர்மபுரி மாவட்டம்.

கடிதஎண். கோ 1/ 2022/ உ.பொ. / வா.அணை/ நாள் : 28 .10 . .2022.

ஐயா ,

பொருள் : தர்மபுரி மாவட்டம் –பாப்பிரெட்டிப்பட்டிவட்டம் – வரலட்சுமி கிழங்கு மில்.–பீனியாற்று நீரினை பயன்படுத்திகொண்டு உள்ளார்கள்– திருசுரேஷ்,அவர்கள் அளித்தமனுவிற்குபதில்அளித்தல்– சார்பாக

பார்வை : 1. வருவாய்கோட்டாட்சியர் ,அரூர்.அவர்களின்நகா.க.எண் : 142 /2022 / A 6 நாள் : 10 9 2022
2. செயல்அலுவலர்,தேர்வுநிலைபேரூராட்சி,பாப்பிரெட்டிப்பட்டி அவர்களின் கடிதஎண் : 7 //04 / 2022 1 நாள் : 21 .9 . 2022

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மேற்படிபார்வையில் திரு.சுரேஷ்,, பீனிஆறு பாதுகாப்பு விவசாயிகள் இயக்கம், அலமேலுபுரம், அவர்கள் பாப்பிரெட்டிப்பட்டி டவுன் பஞ்சாயத்தில் அலமேலுபுரம் கிராமத்தில் உள்ள வரலட்சுமி கிழங்கு மற்றும் மக்காச்சோளம் அரவை ஆலை பினியாற்றை ஆக்கிரமித்து உள்ளதாகவும் ஆற்றுநீரை உபயோகப்படுத்திக் பின்பு சுத்திகரிக்கப்படாத ரசாயனம் கலந்த கழிவு நீரை நேரடியாக ஆற்றில் கலக்கச் செய்துள்ளனர். எனவே தர்மபுரி மாசு கட்டுப்பாட்டு வாரிய அதிகாரிகள் மீதும் பொதுப்பணிதுறை அதிகாரிகள். மீதும் பாப்பிரெட்டிப்பட்டி ,பேரூராட்சி மீதும் நடவடிக்கை எடுக்க வேண்டி மனு அளித்துள்ளீர்கள்.

மேற்காணும் மனுவில் கூறியுள்ள வரலட்சுமி கிழங்கு மற்றும் மக்காச்சோளம் அரவை ஆலையை தள ஆய்வு செய்யப்பட்டது.

(43)

வரலட்சுமி கிழங்கு மற்றும் மக்காச்சோளம் அரவை ஆலைக்கு அருகில் உள்ள ஆறு பீனிஆறு ஆகும் . இந்த ஆறு வாணியாற்றுக்கு துணை ஆறு ஆகும் . இந்த ஆலையின் உட்புறம் இரு பெரிய குழிகள் உள்ளது. இதில் ஒரு குழியின் அளவு சுமார் 200 மீட்டர் மற்றும் 175 மீட்டர் ஆகும். இந்தக் குழியில் தற்பொழுது ஐந்து மீட்டருக்கு மேலாக தண்ணீர் உள்ளது.இந்த குழியின் மட்டம் ஆற்றின் மட்டத்தை விட மிகவும் அதிகமாக உள்ளது ..எனவே ஆற்றில் தண்ணீர் செல்லும்போது ஆலையில் உள்ள குழியில் தண்ணீர் சென்றடைகிறது .மேலும் அந்தக் ஆற்றின் கரைக்கும் இடையே உள்ள அகலம் 4 மீட்டர் ஆகும். இதில் இரண்டாவதாக வெட்டப்பட்ட குழியில் மக்காச்சோள கழிவுகள் கொட்டப்பட்ட நிலையில் உள்ளது . இதனுடைய பரப்பு சுமார் 80 மீட்டர் 35 மீட்டர் ஆகும் .மேலும் தார் ரோட்டில் வரும் மழை நீர் ஆலைக்கும் ஆற்றுக்கும் ஓரமாக ஒரு கால்வாய் மூலமாக வரும் நீரானது அந்த தண்ணீர் உள்ள குழியில் போய் சேரும்படி பைப் போன்று அமைக்கப்பட்டுள்ளது மற்றொரு வழி நேரடியாக மழைநீர் ஆற்றில் சேர்வது போல பைப் அமைக்கப்பட்டுள்ளது . இந்த ஆலையில் உள்ள கழிவுகள் அங்குள்ள நிலங்களில் விடப்படுகிறது. எனவே ஆற்றின் கரையை அளந்து தர வட்டாட்சியர் பாப்பிரெட்டிப்பட்டி அவர்களுக்கு கடிதம் அனுப்பப்பட்டுள்ளது எனவே கூடிய விரைவில் ஆற்றின் அகலம் சர்வே செய்யப்படும் என்பதை தெரிவித்துக்கொள்கிறேன்.

23.10.24

உதவிப்பொறியாளர், நீவது
பாசனப்பிரிவு
பாப்பிரெட்டிப்பட்டி.

அனுப்புநர்,

(5)

M. [redacted]
[redacted]
[redacted] - 636006

பெறுநர்,

திரு. ப. சுரேஷ்
த/பெ பக்தவத்சலம்
தேசிய பாதுகாப்பு மருத்துவமனை இயக்கம்
6/36 அலமேலுபுரம் (அருகில்)
பாலக்கோட்டுப்பட்டி (மாவட்டம்)
திருச்சி (மாவட்டம்)

(45)

நீர்வளத்துறை

அனுப்பதல்:-

பொறி, A.P.கிருபா, பி.இ.,
உதவிப்பொறியாளர்,
நீர்வளத்துறை,
பாசனப்பிரிவு,
வாணியாறு அணை,
பாப்பிரெட்டிபட்டி.

பெறுதல்:-

உதவி செயற்பொறியாளர்,
மேல் பெண்ணையாறு வடிநில உபகோட்டம்,
அரூர்

கடிதஎண். கோ 1/ 2023 /உ.பொ. / வா.அணை/ நாள் :.09. 02 .2023.

ஐயா,

பொருள் : தர்மபுரி மாவட்டம்- பாப்பிரெட்டிப்பட்டி வட்டத்தில் உள்ள வரலட்சுமி, கிழங்கு அரவை ஆலையில் அனுமதியின்றி போடப்பட்ட சைட் போர்களை கான்கிரீட் போடப்பட்டு அடைத்து அறிக்கை -சமர்ப்பித்தல் -சார்பாக.

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தர்மபுரி மாவட்டம், பாப்பிரெட்டிப்பட்டி வட்டத்தில் உள்ள வரலட்சுமி கிழங்கு அரவை ஆலையில் இருந்து வரும் கழிவுகள் பிணியாற்றில் கலந்து அங்குள்ள நிலத்தடி நீரை பாதிப்பதாகவும் ,மேலும் பிணியாற்றில் வரும் தண்ணீரை அவர்கள் எடுத்துக் கொள்வதாகவும் புகார் அளித்தார்கள். இதன் பெயரில் அந்த தளத்தை ஆய்வு செய்து அதில் பீனியாற்றில் உள்ள செடி கொடிகள் அகற்றப் பட்டது. மேலும் நில அளவையர்கள் மூலம் பிணியாற்றில் அளந்து ஆக்கிரமிப்புகள் ஏதும் இல்லை என அறியப்பட்டது. மேலும் பினியாறு ஆற்று நீர் விவசாயிகள் சங்கத்திலிருந்து சுரேஷ் மற்றும் கிருஷ்ணமூர்த்தி ஆகியோர் வரலட்சுமி ஆலையில் உள்ள குளத்தில் சைடு போர் போட்டு அவர்கள் பிணியாற்று நீரை எடுப்பதாக புகார் கூறினார்கள் ,

எனவே பிணியாற்று விவசாய சங்க தலைவர் மற்றும் உறுப்பினர்கள் சார்பில் முன்னிலையில்11 அந்த சைடு போர்வெல் பகுதி கண்டறியப்பட்டு அதனை

(46)

கான்கிரீட் மூலம் அந்த ஓட்டைகள் அடைக்கப்பட்டது என்பதை தகவலின் பொருட்டு தக்க நடவடிக்கைக்கு அனுப்பப்படுகிறது.

9/2/23

உதவிப்பொறியாளர்,
நீர்வளத்துறை, பாசனப்பிரிவு,
பாப்பிரெட்டிபட்டி.

இணைப்பு: புகைப்படம்

(47)

P. அலோசி
S/o பக்ஷையப்பன்
ஒருங்கிணைப்பாளர்
தீண்டாமை ஒழிப்பு முன்னணி இயக்கம்.
அரவேகுறிச்சி (அ) மற்
பாலக்கோடு வட்டம் TK.
636 809

உதவிப்பொறியாளர் (நீ.வ.து),
பாசனப் பிரிவு,
பாப்பிரெட்டிப்பட்டி.

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NO. EHSR 0228/DEE/HSR/ 2009 dated. .04.2009

TAMIL NADU POLLUTION CONTROL BOARD

INSPECTION REPORT

1.	(a)	Name of the Inspecting Officer	:	M.Saravanakumar, AE	
	(b)	Designation	:		
	(c)	District / Region	:	Hosur	
2.	(a)	Date of receipt of Application (for expansion)	:	Water Act 13.04.2009	Air Act 13.04.2009
		Additional particulars submitted on		28.04.2009	
	(b)	Date of Inspection	:	25.04.2009	
3.	(a)	Name of the Unit	:	**M/s. Varalakshmi Starch Industries Pvt Ltd**	
	(b)	Location of the Unit (i) Survey No	:	75pt,77pt,78pt etc.	
		(ii) Village	:	Alamelupuram & Pappireddipatti	
		(iii) Taluk	:	Pappireddipatti	
		(iv) District	:	Dharmapuri	
		(v) Local Body	:	Pappireddipatti Panchayat Union	
	(c)	Address of unit's Registered Office	:	87,Gandhi Road Salem 636 007	
4.	Date of Commissioning		:	Aug 2009 (Proposed)	
5.	Total Gross Fixed Assets (Rs. Lakhs)		:	For Plant 3852.83	ETP/APC 779.29 Total 4632.12
6.	(a)	Category / Classification of the unit	:	Orange/ Large	
	(b)	Type of the Unit	:	Sago	
7.	(a)	Name of the Occupier of the Unit	:	Thiru. V.Anbalagan, Managing Director	
	(b)	Representative who accompanied during inspection 1) Name	:	Thiru. Suresh	
		2) Designation	:	Whole Time Director	
		3) Signature	:	Sd:-	

District Environmental Engineer
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8.	Extent of land occupied	:	Owned & Leased
	(a) Total	:	37.86.6 (35.8) Hectares
	(b) Built up area		
	(i) Total	:	3.0 Hectares
	(ii) ETP / APC Part	:	0.6 Hectares
	(c) Land earmarked for irrigation using treated effluent	:	24.33
	(d) Land earmarked for Solid waste Storage / disposal	:	7
9	Number of Employees per day	:	136
10.	Products manufactured		
	(a) Main Products	:	1. Native Tapioca Starch– 900 T/M 2. Modified Starch- wet process • Oxidised Starch – 2000 T/M • Cationic Starch – 300 " • Spray Starch - 300 " Modified Starch- dry process • Acetylated Starch – 300 T/M • Yellow Dextrin – 150 " • White Dextrin – 150 " • Carboxyl Methyl Starch – 100 " • Pre-geletinised starch – 300 " 3. Maize Starch & modified starch - 7000 T/M
	(b) By Products	:	1. Generation of Power – 1540.8 MW/M 2. Tapioca Thippi – 2000 T/M 3. Maize germ dry – 900 " 4. Maize gluten dry – 675 5. Maize husk (fibre dry) – 1460 "
	(c) Intermediate Products	:	-Nil-
	(d) End use (Local Market / Export)	:	Starch for food and industrial use
11.	Raw materials in T/Day	:	Enclosed vide annexure-I
12.	Manufacturing process (For each product)	:	Enclosed vide annexure-II
13.	(A) Water Requirement in KLD		
	(i) Source of Water (Well, River, Stream, Lake, Pond, sea)	:	Rain water
	(ii) (a) Domestic	:	6.8
	(b) Cooling	:	Nil
	(c) Process	:	780
	(d) Others (gardening)	:	2

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Tamil Nadu Pollution Control Board
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(B) Quantity of Effluent in KLD

(I) Sewage : 5.4

(II) Trade Effluent : 780

(C) Sources of Trade Effluent : Taploca washing, crushing, separator (centrifuge),maize steeping.

14. **Details of Effluent Treatment Plant**

Effluent Nature	Components of ETP	Nos.	Dimensions in M	Mechanical Equipment like aerator	
(1)	(2)	(3)	(4)	Capacity	Nos.
Sewage	Annexure III may be referred				
Trade Effluent					

Note: - The characteristics of the treated effluent as per the ROAs are to be enclosed indicating also the parameters exceeding the limit.

15.	Point of disposal of effluent (Land/Irrigation / Public under ground Sewer / Sea/ Stream/ River/Bay)			Sewage	Trade Effluent
				Combined effluent, after treatment, to be discharged on land for gardening.	
	(a)	Area of Land in Hectares used for irrigation			
		Own Land	:	24.33	
		Lease Land	:	NA	
		Solar Evaporation	:	NA	
		Total	:	24.33	

	(b)	Name and distance of the water body, from the unit if effluent reaches the water body	:	Not Applicable

	(c)	Description	Out let No.		Point of disposal
		(i) Sewage	01	:	On Industries own land.
		(ii) Trade Effluent	02	:	On land for irrigation

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16. Details of Air Pollution Control Measures

S.No	Sources of Emission	APC Measures provided	Stack Details		Stage/Operational Condition
			Dimensions (dia in mm)	Height from GL (in Meter)	
	Enclosed vide annexure-IV				

Note: -Characteristics of the emissions as per the ROA of AAQ / Stack Emissions survey is to be enclosed indicating also the parameters exceeding the limit.

17. Details of Solid Wastes

S.No	Nature of Solid Waste	Quantity	Method of Handling			Status of Authorization & Validity
			Collection	Treatment	Disposal	
1.	**Non – Hazardous** 1.Outer most skin & Soil particles	21.75 T/day	Manual	Nil	Used as manure	
	Hazardous (Indicate Category Number)	Nil				

18. Details of remittance of consent fee and cess:

Particulars	Consent fee		Cess in Rs.
	Water Act in Rs.	Air Act in Rs	
Arrears Up to 31-3-2009	Nil	Nil	
Demand for the current year 2009- 2010	40000	40000	
Total amount to be paid	40000	40000	
Amount remitted with CR.No. and Date	Rs. 50000/- remitted vide CR.No.69605 dt. 16.03.2009 Rs. 30000/- remitted vide CR.No.69017 dt. 17.09.2008		
Balance amount to be paid	Nil	Nil	

19 Details of complaint — No complaint against the unit.

(a) Name of the Complainant
(b) Nature of Complaint
(c) Details of Investigation
(d) Action taken on the complaint

District Environmental Engineer
Tamil Nadu Pollution Control Board
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20. Details of Legal Action
    (a) Nature of the case : Nil
    (b) Date of filing :
    (c) Case Number :
    (d) Name and place of the Court :
    (e) Present stage of the case :

21. Whether the unit is coming under the purview of EIA Notification. If so, the details there on. : No-

22. Whether the unit is coming under the purview of CRZ Notification. If so, the details there on. : No-

23. Details of nearby water bodies

a. Name as found in records : River Vaniyar

b. Whether the water source is included in the G.O.Ms. No.213 / E & F Dept. dt.30.03.89 and G.O. Ms.No. 127 / E & F Dept. E.C – 3 / dt. 8.5.98 : Yes included in GO.Ms No:213 Dated 30.3.89 but not included in G.O. Ms.No. 127 / E & F Dept. E.C – 3 / dt. 8.5.98

c. Distance (in meter) : 3.5 KM

d. Confluence Point : Bay of Bengal

e. Topographical details with reference to the unit's site : The water source and site are divided by land, industries and habitation.

f. Whether unit's effluent reaches the water sources (or) possibility exits : No-

24 Land use pattern in the vicinity

East : Varattar odai & Dry Agri lands

West : Existing Industries.

North : Dry Agri lands

South : Road, & Existing Industries

25. Details of habitation

S.No.	Name	Distance in Kms	Population in 1000s
1.	Pappireddipatti	1.5	0.4

26. (a) Name of the nearby Roadways (Viz.) NH / SH / MDR / ODR : Salem – Harur Road (SH)

(b) Distance from the site in Kms : 0.2

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27.	(a) Land use classification of the site	:	Unclssified Area
	(b) Authority which classified the land use	:	DTCP
28.	Name and distance of the sensitive area like places of Archeological importance, National Park, Wild Life/ Birds sanctuary, Marine National Park, Mangrove Forests, reserved forests if any (Note: Topo Sketch showing the details in item No. 24 to 27 is to be enclosed)	:	No sensitive areas nearby.
29.	Any other information	:	Annexure V may be referred
30.	Specific recommendations on the issue of Consent under Water and (P&CP) Act, 1974 as amended and Air (P & CP) Act, 1981 as amended	:	

28/4/09 AE/Hosur
Signature of the Inspecting Officer

Recommendation of the DEE:

AE-I to clarify the following.

i. Renewal for the existing boiler ?
ii. The proposed power generation will attract EIA ?
iii. Whether the industry has applied / obtained CoW. clearance from the concerned authority for the proposed expansion.
iv. Present stage of ~~with~~ construction if any for expansion activity.

District Environmental Engineer
TNPC Board, Hosur

15/5/09
DEE/TNPCB/Hosur.

Verified.
26/6/09
DEE

District Environmental Engineer (A/C)
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ANNEXURE - I (54)

Raw material

Chemical requirement for the existing plant and that after expansion

List of all materials	Principal use	Amount in MT/Month	
Chemicals : (Inorganic)		**Existing**	**After expansion**
1. Caustic Soda Lye (Sodium Hydroxide)	For Oxidised Starch, Cationic Starch & Spray Starch	21.00	60.00
2. Hydro Choric Acid	For Oxidised Starch, Spray Starch Acetylated Starch & Dextrins	20.00	30.00
3. Sodium Hypo Chlorite	For Oxidised Starch	300.00	500.00
4. Sulphur	For Native Tapioca Starch	0.90	1.20
5. Nitrogen (Food to Reactors)	---	---	15.00
6. Sodium Mono Chloro Acetate	For Carboxy Methyl Starch	15.00	25.00
7. Cationic Reagent	For Cationic Starch	2.00	40.00
8. Acetic Anhydrite	For Acetylated Starch	4.00 kL	1.50 kL
9. Caustic Soda Flakes	For Carboxy Methyl Starch	1.50	1.50
10. Sodium Phosphate	For Acetylated Starch	1.00	1.00
11. Calcium Chlorite	For Water Treatment	1.00	1.00
12. Ferrous Sulphate	For Water Treatment	0.60	0.60
13. Bleaching Powder	For Water Treatment	1.00	1.00
14. Hydrated Lime	For Water Treatment	8.00	10.00
15. Sulphur	For Maize Starch	—	10.00
TOTAL		372 MT/ month + 4 kL	696.3 MT/ month + 1.5 kL

16. Tapioca 14400 T/m 18000 T/m

17. Maize — 11,000 T/m

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District Environmental Engineer (a/c
Tamil Nadu Pollution Control Board
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ANNEXURE II

Manufacturing Process (Expansion) (Maize Starch & Bye product)

The Proposed stage wise procedure involved in maize starch production is detailed as under.

Unloading and Cleaning

Raw Maize received from farmers is unloaded and it is cleaned to remove solid impurities like cob, chaffs, sand and other undesirable foreign matter. The solid waste items and packing material are returned to the farmers and then cleaned maize is taken for process or stored into silos.

Maize Steeping

The cleaned maize is softened by steeping process by using recycled process water for duration of 40 to 60 hours at a temperature of 48 to 52°C. In this process the maize absorbs water and become soft to enable easy separation of germ. After steeping, the water from the steeping tanks is fed into bio methanation reactors to produce bio gas and to reduce the BOD and COD in the effluent.

Pre-Milling and Germ Separation

The softened maize is subjected to coarse grinding/pre-milling where the maize is coarsely ground to release the germs without damaging them. As the germ is much light in density than the broken maize kernels, the germ is easily separated by using cyclones. The germ coming out of germ separating cyclones sent to dewatering section where the water from the germ is separated and sent back for steeping processing. The wet germ from the germ separation section is then dried in a germ drier and disposed off as a byproduct.

Fine Milling and Fibre Separation

The coarsely ground maize kernels free from germs are then ground through fine mill, finally to liberate maize slurry containing fiber, starch and gluten. The fiber is removed from the slurry by DSM Screen. The fiber thus removed is sent to fiber de-watering section where the free water from the wet fiber is removed and recycled into steeping processing. The fiber after reducing of water is then dried and disposed off as a byproduct.

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Tamil Nadu Pollution Control Board
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Gluten Separation

The mixture of gluten and starch slurry free from fiber and germ is sent to primary gluten separator. Here the gluten is of lower density than starch and so gluten slurry and starch slurry both are separated. The gluten slurry separated in this section is sent to Gluten concentrator (gluten thickening separator) and concentration section where the excess water is removed from the gluten and the water recycled into steeping process. The concentrated gluten cake from vacuum belt filter is sent to gluten drying section where it is dried as a byproduct.

Starch Slurry Washing and Dewatering

The starch milk after releasing the gluten is then thoroughly washed with the help of fresh water through 12 stage Hydro cyclones. After washing, the process water is removed from the starch milk and the water is recycled into milling section processing.

Starch Dewatering

The concentrated starch milk is passed through De-Hydrating Centrifuge for reducing moisture content upto 30% - 35%. The outlet water contains small portion of starch and it is recycled to starch slurry dewatering section.

Starch Drying

The wet starch /starch cake obtained from dewatering section is then dried in flash drier by using hot air. The dry starch obtained from the starch drier is sieved and then fine starch powder is packed and disposed off as finished product.

The crushing capacity and the various products likely to be generated for the proposed maize plant are presented in the Table 5.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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ANNEXURE III

DETAILS OF ETP

S.NO	COMPONENTS OF ETP	NOS	DIMENSIONS (IN M)
1	SEPTIC TANK	1	6 x 2.4 x 3
2	SOAK PIT	1	1.5 dia x 5
	ETP FOR TRADE EFFLUENT		
1	COLLECTION CUM PUMPING SUMP	1	3.4 x 1.2 x 1.6
2	BIO-METHANATION REACTOR	4	16.4 dia x 12.7 height
3	BIO-METHANATION REACTOR	2	16.4 dia x 12.7 height (Proposed)
3	ANAEROBIC LAGOON	1 1	27 x 33 x 3 27 x 39 x 3
4	AERATION TANK	8	12 dia x 2.0
5	SETTLING TANK	2	32 x 13 x 2
6	SLUDGE DRYING BEDS	5	10.2 x 15.3 x 0.6
7	CLARIFIER	1	22.5 dia x 3.6

28/4/09

AE/Hosur

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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ANNEXURE- IV

Details of Air Pollution Control Measures - Existing

S.No	Sources of Emission	APC Measures provided	Stack Details		Stage/Operational Condition
			Dimensions (dia in m.m)	Height from GL (in Meter)	
	EXISTING				
1	Drier	Stack	500	9.2	In operational condition
2	Drier	Stack	500	9.5	In operational condition
3	Drier	Stack	500	9.5	In operational condition
4	Furnace	Stack	500	10.85	In operational condition
5	Furnace	Stack	500	10.85	In operational condition
6	Furnace	Stack	500	10.85	In operational condition
7	Sulphitation Plant	Stack	420	17.30	In operational condition
8	Sulphitation Plant	Stack	420	17.30	In operational condition
9	DG Set – 380 KVA	Stack	150	4.0	In operational condition
10	DG Set – 380 KVA	Stack	150	4.0	In operational condition
11	DG Set – 380 KVA	Stack	150	4.0	In operational condition
12	DG Set – 380 KVA	Stack	150	4.0	In operational condition
13	DG Set – 500 KVA Dual Fuel	Twin Stack	150	7.0	In operational condition
14	DG Set – 500 KVA Dual Fuel	Twin Stack	150	7.0	In operational condition
15	DG Set – 110 KVA	Stack	80	4.0	In operational condition
16	Cooling blower	Bag filter & Stack	400	8.5	In operational condition
17	Cooling blower	Bag filter & Stack	400	8.5	In operational condition
18	Cooling blower	Bag filter & Stack	400	8.5	In operational condition
19	Cooling blower	Bag filter & Stack	400	8.5	In operational condition
20	Cooling blower	Bag filter & Stack	400	8.5	In operational condition
21	Cooling blower	Bag filter & Stack	400	8.5	In operational condition
22	Hot water generator	Stack	300	5.4	In operational condition
23	Thermic Fluid heater	Stack	600	15.0	In operational condition
24	Chiller	Stack	300	5.4	In operational condition
25	Chiller	Stack	300	5.4	In operational condition

District Environmental Engineer (a/c)
Tamilnadu Pollution Control Board
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Details of Air Pollution Control Measures - Expansion

S.No	Sources of Emission	APC Measures provided	Stack Details		Stage/Operational Condition
			Dimensions (dia in m.m)	Height from GL (In Meter)	
1	Drier	Stack	500	9.2	Proposed
2	Drier	Stack	500	9.5	Proposed
3	Drier	Stack	500	9.5	Proposed
4	Boiler- 30 T/hr	Stack	600	15.0	Proposed
5	Bio gas fuel Gen set-537 KW	Stack	250	7.0	Proposed
6	Bio gas fuel Gen set-537 KW	Stack	250	7.0	Proposed
7	Bio gas fuel Gen set-537 KW	Stack	250	7.0	Proposed
8	Bio gas fuel Gen set-537 KW	Stack	250	7.0	Proposed
9	Bio gas fuel Gen set-537 KW	Stack	250	7.0	Proposed

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

ANNEXURE - V (60)

Any other information.

The unit of M/s Varalakshmi Starch Industries Pvt Ltd, located in Sf No 75pt,77pt,78pt etc Alamelupuram & Pappireddipatti Village, Pappireddipatti Taluk, Dharmapuri District has filed application for expansion activity under Water & Air Acts on 13.4.2009.

In this regard the following particulars are submitted

1. This is an existing industry functioning in the same premises since 1996.
2. The unit has obtained consent of the Board for the manufacturing of Native tapioca starch and other products vide t/o proceedings dated 29.06.2007. Now the unit has applied for consent for manufacturing of starch from Maize

During inspection of the unit on 25.04.2009 the following were observed

1. The unit was in operation. Manufacturing of oxidized starch was under progress.
2. Construction of factory building for expansion activity was under progress.
3. The unit has proposed to install two bio-methanation reactors under expansion activity in addition to the existing four reactors for recovery of methane gas from the effluent.
4. The unit has proposed to treat the entire qty of trade effluent to be generated under expansion activity in the existing ETP and proposed to discharge the treated effluent on its land for irrigation. The unit has adequate land available to utilize the effluent for irrigation.
5. Centre for Environmental Studies, Anna University, Chennai has furnished adequacy report stating that the existing ETP is adequate to treat the effluent to be generated from the proposed expansion activity.
6. The unit is covered in Annexure- I of list of highly polluting industries in G.O.Ms. No.213 / E & F Dept. dt.30.03.89 and G.O. Ms.No. 127 / E & F Dept. E.C – 3 / dt. 8.5.98. River Vaniyar which is mentioned in Annexure II to G.O.Ms. No.213 / E & F Dept. dt.30.03.89 is flowing at a distance of about 3.5 KM from the unit. Hence it does not attract the G.O.Ms. No.213.
7. The unit is located in Pappireddipatti block and as per GO M.S NO.51 the block is categorized as over exploited.
8. The unit has informed that it is going to utilize the Rain Water harvested and stored in a pond within the premises to meet the daily water requirement for industrial throughout the year.
9. Further the unit has furnished NOC obtained from Executive Engineer, PWD, Ground Water division, Vellore for taking stored harvested rain water from rain water collection tank for the process. However report on adequacy of rain water harvesting system to meet the water requirement for industrial purpose is not furnished by the unit.

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

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10. The unit has four open well located within the premises.

11.

Hence in view of the above it is recommended that consent to establish under Water and Air Acts for expansion activity may be considered to the unit subject to the following conditions

1. The unit shall install additional Bio Methanation reactors as proposed and O & M the ETP efficiently so as to satisfy the standards prescribed by the Board.
2. The unit shall install the APC measures as proposed so as to satisfy the AAQ/Emission standards prescribed by the Board.
3. The unit shall furnish report obtained from recognized educational/research institution on adequacy of rain water harvesting system to meet the water requirement for domestic and industrial purpose.
4. The unit shall ensure that there is no change in the manufacturing process and products manufactured.

28/4/09

Assistant Engineer
TNPC Board, Hosur

11. The unit has proposed Five Bio gas based generators to produce 1540.8 MW/month of Power ~~from the~~ using methane gas generated in Bio methanation Reactor.

Water Balance
Mat - Balance
Rainwater for the area.
EIA for power generation?
Cattle water drinking.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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o/c

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TAMILNADU POLLUTION CONTROL BOARD

Proceeding No.F.0022DMP/OL/DEE/TNPCB/DMP/W/2018 dated : 29/01/2018

Sub:	Tamil Nadu Pollution Control Board–Industries–M/s.Varalakshmi Starch Industries Private Limited, S.F.No. 75Part, 77Part,78Part,168Part of Pappireddipatti Village & 121PT, 125Part,128-132Part, 138Part of Alamelupuram Village, Pappireddipatti Taluk , Dharmapuri District . – Non compliance of conditions of consent order issued under Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 – Show Cause Notice– Issued- Reg.
Ref:	1.T/o Proc No.F.0022DMP/OL/DEE/TNPCB/DMP/W/2017 DATED: 27/09/2017 2. Units letter Ref VSIPL/PCB/2017-18/366/RPAD dated 08/01/2018 3. Inspection of the unit by this office on 24/01/2018

****

The Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 is in force in Tamil Nadu. Tamil Nadu Pollution Control Board enforces the said Act.

Consent order/ Renewal of consent order/ direction was issued under Water (Prevention and Control of Pollution) Act, 1981 as amended (hereinafter referred to as the Water Act) to the unit of M/s.Varalakshmi Starch Industries Private Limited,
S.F.No. 75Part, 77Part,78Part,168Part of Pappireddipatti Village
& 121PT, 125Part,128-132Part, 138Part of Alamelupuram Village,
Pappireddipatti Taluk ,
Dharmapuri District .
vide reference first cited to comply with certain conditions.

During inspection of your unit on 24/01/2018, the following violations were observed.

1. The unit was under operation carrying out tapioca root crushing without adhering the renewal of consent conditions
2. All units of effluent treatment plant including UASBR were not under operable condition
3. The effluent generated from root washing was seen stagnated adjacent to root washing area
4. The untreated trade effluent is discharged on land for open percolation and found to be stagnated in low lying area thereby causing mosquito breeding/dengue.

Thereby you are violating the conditions already issued from the Board under the provisions of Section 25 of the Water Act, which are offences punishable under Section 44 of the Water Act with imprisonment for a term which shall not be less than one year and six months, but which may extend to six years and with fine.

Hence, you are directed to show cause within 7 days from the date of receipt of this notice as to why penal action for offences punishable under Section 44 of the Water Act should not be initiated against you and also as to why directions under Section 33A of the Water Act should not be issued for closure of the unit, stoppage of power supply, water supply etc., to the said unit.

It is informed that non-receipt of any reply within the prescribed period will be construed that you have no satisfactory explanation to offer for the above said contraventions and action will be

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(63)

taken on merits in accordance with law.

29/01/18

District Environmental Engineer
Tamil Nadu Pollution Control Board,
DHARMAPURI

To,
The Managing Director
M/s. Varalakshmi Starch Industries Pvt. Ltd
7/114-126 BOMMIDI MAIN ROAD, PAPPIREDDIPATTI POST & TK

Copy to
Submitted
To
The Joint Chief Environmental Engineer (M) Tamilnadu Pollution Control Board Opposite to Auxilium College ,Gandhi Nagar , Vellore-6
Submitted
To
The Member Secretary
Tamilnadu Pollution Control Board
No 76,Mount Salai, Guindy ,Chennai -600032

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(64)

VARALAKSHMI STARCH INDUSTRIES (P) LTD.

An ISO 9001:2008, 14001:2004, BS OHSAS 18001:2007 Certified Company

Mfrs. & Exporters : SUPER HIGH GRADE TAPIOCA STARCH, MAIZE STARCH, MODIFIED STARCHES & SAGO

VSIPL/PCB/2017-18/394/RPAD

P.H 19/02/18

12 FEB 2018

To

The District Environmental Engineer,
Tamilnadu Pollution Control Board,
Dharmapuri.

Dear Sir,

Sub: Effluent Treatment - Crushing Operations – reg.,

Ref : 1) Your Proceeding no.F.0022DMP/OL/DEE/TNPCB/DMP/W/2018 dated 29/01/2018

2) Our letter no. VSIPL/PCB/2017-18/386/RPAD dated 08/01/2018

In your proceeding cited above, you have mentioned that,

1. The Unit was under operation carrying out Tapioca root crushing without adhering the renewal of consent condition.
2. All units of effluent treatment plant including UASBR were not under operable condition.
3. The effluent generated from root washing was seen stagnated adjacent to root washing area.
4. The untreated trade effluent is discharged on land for open percolation and found to be stagnated in low lying area thereby causing mosquito breeding dengue.

In this regard strictly following your notice / communication, we would like to bring to your kind attention that there was no crushing operation in our factory for a long period i.e., from 10/05/2016 to 07/01/2018 due to the following reasons.

1. From 16/07/2016 to 30/06/2017 due to Indefinite Labour Strike.
2. From July till December 2017 due to OFF season, no Tubers were available.

Both were beyond the Control of our Management.

Regd. Office : "Varalakshmi Tower", II Floor, No. 127/1, Gandhi Road, Salem - 636 007. T.N. India.
Ph. (Off.) : 0427-2316280, 2316281, 2312854 Fax : 0427-2318854, 2316186 e-mail : info@varalakshmistarch.com
Factory : No. 7/114-126, Bommidi Main Road, Pappireddipatti (Po), Dharmapuri Dt. - 636 905.
CIN No. U01532TZ1995PTC006136 www.varalakshmistarch.com

IS : 1319

CM/L-6299891

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

Varalakshmi Starch Industries (P) Ltd.,

Continuation Sheet

Vide our letter cited in reference number 2, we have informed you that we have started our crushing operations from 08/01/2018. We have started just 10% to 15% of our crushing capacity for generating anaerobic bacteria gradually in our UASB reactors. It is also stabilising.

The UASB reactors are perfectly commissioned. Due to the strike prevailing in our factory for around one and half year, all trained employees had left. Now, we are choosing all raw hand freshers and they are being trained in the crushing plant by the Management (Managing Director & Director) thoroughly, sometime due to our untrained operators in the crushing plant, processed water left out from the pipeline time in the crushing area only. But finally, the effluent is collected and diverted into the Effluent Treatment Plant without passing through the UASB and aerator it cannot go outside.

We are taking serious measures to avoid any untreated effluent discharge on our surface. May be treated effluent due to the improper worker incapable handling has got stagnated at the time of your inspection. But now that also has been rectified.

Thank you for your kind and timely guidance.

We will definitely follow all the prescribed norms pertaining to the consent of renewal always. Hence, we request you to kindly drop further proceedings on the Show Cause Notice under reference and oblige.

Thanking you.

Yours Faithfully,
For VARALAKSHMI STARCH INDUSTRIES (P) LTD.,

(V.Anbalagan)
Managing Director

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

RPAD

(66)

64
65

o/c

TAMILNADU POLLUTION CONTROL BOARD

From

Er. P.Sivarudrappa M Tech ,MBA
District Environmental Engineer,
Tamilnadu Pollution Control Board,
Door No 8 ,First Floor ,
5 th Cross Street ,Appavu Nagar,
Dharmapuri - 636701

To

The Managing Director
M/s Varalakshmi Starch Industries
Pvt Ltd
D No 7/114-126 , Bommidi Main Road
Pappireddipatti Post &Taluk
Dhramapuri District- 636905

Letter.No.DEE/TNPCBd/DMP/F0228 /2018 dated 08 /03/2018.

Sir

Sub: TNPC Board –Dharmapuri – Industries - M/s Varalakshmi Starch Industries Pvt Ltd ,D No 7/114-126 , Bommidi Main Road, Pappireddipatti Post & Taluk Dharamapuri District – Operation of the unit certain action to be initiated -Reg.

Ref: 1. T/o Proc No F0022DMP/OL/DEE/TNPCB/DMP/W/2018 dated29/01/2018
2. Units letter dated 17/02/2018
3. Inspection of the unit by this office on 06/03/2018
4. Personal hearing held on 19.02.2018.

I am to invite your kind attention to reference I st cited above, where in the unit of M/s Varalakshmi Starch Industries Pvt Ltd located at SF No 75Part Pappireddipatti Village &Taluk ,Dharamapuri District had been served with a Show cause notice for operating the unit by violating the consent condition and the unit had made a reply to the show cause notice vide reference 2 ndcited above ensuring that its operation will strictly adhere to the consent condition.

Personal hearing was conducted on 19.02.2018 and the unit was instructed to comply with consent/RCO condition, rectify the defects in Effluent Treatment Plant and operate the ETP effectively.

அலுவலகம் நகல்

12/3/18

In this regard the unit was inspected on 06.03.2018 the following were observed

1. The unit was under operation
2. During inspection it was noted that the unit had not made any efforts to enrich/improvethe MLSS level and the treated effluent discharged for irrigation was blackish in colour.
3. The stagnation/ ponding of effluent in the UASBR area due to leakage in the feed pipe to UASBR observed.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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4. The unit is found to use flexible hoses in the effluent treatment plant area for transfer of untreated effluent was noticed.
5. Further Stagnation/Ponding of effluent due to discharge of treated effluent for irrigation observed in the Northern side of the unit / irrigation area, thereby violating consent condition.

In this regard the unit is instructed to expedite the following

1. The unit shall adhere to the conditions as stipulated in the Consent order. The unit shall not mix any chlorine bearing effluent bleach liquor / or any bleaching agents in UASBR, at any time.
2. The unit shall take steps to improve MLSS level in the aeration tank and add nutrients to improve biological process and submit report.
3. The effluent feed pipe to the UASBR shall be rectified immediately so as to avoid stagnation/ponding of effluent and report.
4. The flexible hoses shall be immediately replaced with permanent rigid pipes in the ETP area for transfer of treated effluent for irrigation only.
5. The unit shall avoid Stagnation/Ponding of treated effluent and submit action plan at once.
6. The effluent treatment area shall be properly fenced, so as to avoid any accidents.
7. The unit shall improve its housekeeping in and around ETP area and report.
8. The unit shall adhere to the Industrial Safety standards as advised by the competent authority and erect display Board mentioning the Hazard involved in each treatment plant unit..
9. The unit shall furnish effluent flow details, power consumed for ETP operation (log book) from 20.02.2018 to till date.

The receipt of this letter may be intimated on or before 26.03.2018 along with action taken to report.

12/03/2018

District Environmental Engineer
TNPC Board, Dharmapuri

District Environmental Engineer(a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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Compliance Report on the renewal of consent order conditions stipulated under Water Act

Sl.No.	Conditions	Status
1	The unit shall adopt drip irrigation and avoid stagnation of treated trade effluent in consultation with Tamilnadu Anna University and submit report.	We are having 35.80 hectares area for irrigation and we had grown about 2000 Nos. of Coconut Trees and also we are making tree sapling with eucalyptus and other trees to more improve the green belt. Due to seasonal industry, the treated water supply for irrigating these lands only during the season which spreads over about 4 months in a year. Because of this the trees in some part of our land had withered leaving the lands barren without any green belt. After commissioning our Maize Starch Plant the running of ETP would be through out year and the problems will be solved.
2	The unit shall explore the possibility of providing additional Anaerobic Digesters to recover bio gas and to reduce Pollution load in the treated trade effluent	We have decided to construct two Nos. of PISMAR Reactors additionally and accordingly we have applied for consent for establishment.
3	The activities shall not lead to public complaint	Yes – being followed
4	The unit shall ensure that the treated / untreated trade effluent shall not gain access to nearby odai directly or indirectly under any circumstances	Yes – complied with
5	The unit shall explore the possibilities to reuse the treated effluent so as to achieve zero discharge.	We have invested several crores of rupees in the Waste Water Treatment Plant for achieving the efficiency in the ETP with the prescribed PCB levels. To achieve zero discharge of treated effluent water we have to reprocess again the treated water for upto process water standard level for which we have to spent huge amount as capital investment and running expenses. As such it will straight away to increase our cost of finished product by around Rs. 1,000/- per MT. In this situation all the Indian Starch and Modified Starch Manufacturers should follow the zero discharge system and they also spent the same amount for this purpose then automatically their cost of product would be increased then only we can sell our finished product in the market compared with competitors price. In addition to the above, now a days the imported Modified Starches landed cost is cheaper than our cost of product due to very low import duty. The Government of India should increase the import duty on Modified starches for increasing the landed cost which is higher than our cost of product. When these two are implemented, at the same time we will spent the money for zero discharge at our factory. Incase the PCB are forcing us without implementing the above two, our industry is straight away may become sick due to non-matching of the cost of product in the market. In this situation we are making properly discharging of treated waste water. After putting another two more Reactors our waste water treatment system would be zero defects.

Compliance Report on the renewal of consent order conditions stipulated under Air Act

Sl.No.	Conditions	Status
1	The unit shall operate and maintain the existing Air Pollution Control Measures efficiently and continuously so as to achieve the Ambient Air Quality emission/Ambient Noise Level standards prescribed by the Board	Yes - being maintained
2	The activities of the unit shall not lead to Public complaint	Yes - being followed

District Environmental Engineer O/C
Tamil Nadu Pollution Control Board
DHARMAPURI

For [illegible] Ltd.

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VARALAKSHMI STARCH INDUSTRIES (P) LTD
PAPPIREDDIPATTI

CONSOLIDATED REPORT OF ANALYSIS OF THE TREATED TRADE EFFLUENT SAMOPLES COLLECTED BY TAMILNADU POLLUTION CONTROL BOARD OFFICIAL DURING THE YEAR 2007-2008

SL.NO	PARAMETER	UNITS	REPORTED VALUE - SAMPLE COLLECTED ON			
			5/4/2007	13/11/2007	22/11/2007	20/11/2008
1	pH	Number	8.16	9.63	7.29	6.82
2	TOTAL SUSPENDED SOLIDS	mg/l	172	154	288	88.6
3	TOTAL DISSOLVED SOLIDS	mg/l	8056	2022	8748	6864
4	CHLORIDE	mg/l	2204	1069	1900	1729
5	SULPHATE	mg/l	50	103	153	74
6	OIL & GREASE	mg/l	<5.0	<1.0	<8.0	<3.0
7	BOD 3 days at 27 deg.cen	mg/l	63	56	216	138
8	COD	mg/l	440	240	680	480

For Varalakshmi Starch Industries (P) Ltd.,

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

(70)

VARALAKSHMI STARCH INDUSTRIES (P) LTD
PAPPIREDDIPATTI

COMPLIANCE REPORT ON THE RENEWAL OF CONSENT ORDER CONDITIONS STIPULATED UNDER WATER ACT VIDE WATER CONSENT ORDER NO. 15081169177 PROCEEDINGS No.F. 0022DMP/RL/DEE/TNPCB/DMP/W/2016 DATED 05/05/2016

Sl.No	Conditions	Status
01.	The Unit shall improve, operate and maintain its Effluent Treatment Plant effectively and continuously so as to bring the quality of treated effluent to the standards prescribed by the Board at all times.	Yes – We are regular in complying with the directions of Pollution Control Board and our ETP is treating the trade effluent up to the standards prescribed by the Board.
02.	The unit shall reuse its treated trade effluent for its process to the maximum possible extent as reported and ensure that the treated /untreated effluent shall not gain access to outside the premises under any circumstances.	Currently we are reusing around 50% of the treated effluent for our raw material prewashing and cleaning purpose. Further we propose to reuse more quantum of treated water for some other purpose in our plant and remaining treated effluent using for irrigation purpose in our green belt area.
03.	The unit shall furnish proposal in consultation with Agriculture Department on the effective utilization of treated effluent for irrigation within three months.	At Present no any Trade effluent and solid organic manure We will furnish the proposal in due course after consulting with Agricultural Department.
04.	The unit shall ensure that the part of the treated trade effluent shall be utilized for irrigation purpose only without flooding / stagnation on the land by adopting the hydraulic loading rate of 35 KL/Hect.	We are having 60 hectares area for irrigation and we have grown thousands of various types of trees and the treated effluent is being used for irrigating these lands.
05.	The unit shall dispose its solid wastes scientifically for further beneficial use.	Yes – The entire quantities of solid waste arising from the plant is being distributed to the farmers who use it in their trash cum farm yard manure pits. So there is no accumulation of solid waste in the plant premises.
06.	The unit shall maintain its rain water harvesting facilities	Yes – We have well established rain water harvesting system whereby we harvest all runoff rain water from the roofs of our industrial buildings as well as vacant areas within the industrial premises, open land area and guide it through storm drains to open water pond having the size of 175 M x 110 M with 20 M of water holding height and store it properly for our industrial use.
07	The unit shall provide EMFM at the out let of ETP and shall be connected to computer recording system.	Due to the indefinite Strike by all worker no crushing and no trade effluent accordingly no record.
08	The unit shall maintain good housekeeping in the process as well as in the ETP area.	We are maintaining good housekeeping in the process as well as ETP areas.

For Varalakshmi Starch Industries (P) Ltd

(V. ANBALAGAN)
Managing Director.

District Environmental Engineer (AIC)
Tamil Nadu Pollution Control Board
DHARMAPURI

COMPLIANCE REPORT ON THE RENEWAL OF CONSENT ORDER CONDITIONS STIPULATED UNDER AIR ACT VIDE AIR CONSENT ORDER NO. 15082169177 PROCEEDING NO. F. 0022DMP/RL/DEE/TNPCB/DMP/A/2016 DATED 05/05/2016

Sl.No	Conditions	Status
01.	The unit shall operate and maintain its Air Pollution Control Measures effectively and continuously so as to bring the Ambient Air quality / emission standards prescribed by the Board.	Yes – we have been controlling air pollution effectively in our unit as evidenced by the enclosed report of Analysis of AAQ survey conducted by the District Environmental Laboratory, Hosur.
02.	The unit shall continue to develop green belt inside the premises.	Yes - We are having 60 hectares' area wherein we have grown thousands of various types of trees to develop the green belt in and around the factory premises and we continue to develop it.

For Varalakshmi Starch Industries (P) Ltd

(V. ANBALAGAN)
Managing Director.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Hosur

30 JUL 2014

REPORT OF ANALYSIS

ROA No : 00471 / DEL / TNPCB / HSR / 2014 - 15, Dated : 30.07.2014

1 **DEE Code Assigned** : SJ - 82 & SJ - 83

2 **Lab Code Assigned** : 339 & 340

3 **Date and Time of Sample collection** : 24.07.2014 at 5.00pm

P-325

4 **Date and Time of Sample receipt** : 25.07.2014 at 10.00am

5 Point of collection : ETP Inlet & ETP Outlet

Sl No.	PARAMETER	UNITS	REPORTED VALUE	
			1	2
1	p^H	Number	4.46	7.21
2	Total Suspended Solids	mg/l	216	186
3	Total Dissolved Solids	mg/l	5842	4116
4	Sulphate	mg/l	246	240
5	Chloride	mg/l	2500	2000
6	Oil and Grease	mg/l	80	40
7	BOD 3 days at 27°C	mg/l	396	116
8	COD	mg/l	1040	880
9	Total Kjeldal Nitrogen	mg/l	840	560
10	Total Residual Chlorine	mg/l	16	8.0
11	Cynaide	mg/l	0.001*	0.001*
12	Percent Sodium	%	43.50	66.24

Amount claimed : **Rs. 6,920/-**

(Sample collection charge : Rs. 800/- + Analysis charge : Rs. 6,120/- = Rs. 6,920/-)

* : Indicates less than

Varalaxmi Starch.

Deputy Chief Scientific Officer,
District Environmental Laboratory,
Tamil Nadu Pollution Control Board,
Hosur.

District Environmental Engineer (AC)
Tamil Nadu Pollution Control Board
DHARMAPURI

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TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Hosur

05 SEP 2014

REPORT OF ANALYSIS

ROA No : 00302 / DEL / TNPCB / HSR / 2014 - 15, Dated : 04.09.2014

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1 DEE Code Assigned : SJ - 113 & SJ - 114

2 Lab Code Assigned : 484 & 485

3 Date and Time of Sample collection : 28.08.2014 at 1.00pm

4 Date and Time of Sample receipt : 28.08.2014 at 6.00pm

5 Point of collection : ETP Inlet & ETP Outlet

Sl No.	PARAMETER	UNITS	REPORTED VALUE	
			1	2
1	p^H	Number	4.80	6.45
2	Total Suspended Solids	mg/l	412	10
3	Total Dissolved Solids	mg/l	3022	882
4	Sulphate	mg/l	281	48
5	Chloride	mg/l	255	265
6	Oil and Grease	mg/l	18	1.0
7	BOD 3 days at 27°C	mg/l	1340	14
8	COD	mg/l	4000	120
9	Total Residual Chlorine	mg/l	8.0	0.40*
10	Percent Sodium	%	39.72	40.10
11	Cynaide	mg/l	0.096	0.040*
12	Total Kjeldal Nitrogen	mg/l	224	56

Amount claimed : **Rs.6,920/-**

(Sample collection charge : Rs. 800/- + Analysis charge : Rs.6120/- = Rs. 6,920/-)

* : Indicates less than

Deputy Chief Scientific Officer,
District Environmental Laboratory,
Tamil Nadu Pollution Control Board,
Hosur.

Verified

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(74)

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TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Hosur. 08 OCT 2014

REPORT OF ANALYSIS

ROA No : 00328 / DEL / TNPCB / HSR / 2014 - 15, Dated : 08.10.2014

P-325

1 DEE Code Assigned : SJ - 130 & SJ - 131

2 Lab Code Assigned : 661 & 662

3 Date and Time of Sample collection : 30.09.2014 at 1.30pm

4 Date and Time of Sample receipt : 01.10.2014 at 10.00am

5 Point of collection : ETP Inlet & ETP Outlet

Sl No.	PARAMETER	UNITS	REPORTED VALUE	
			1	2
1	pH	Number	7.05	7.24
2	Total Suspended Solids	mg/l	522	14
3	Total Dissolved Solids	mg/l	3716	1558
4	Sulphate	mg/l	313	193
5	Chloride	mg/l	450	500
6	Oil and Grease	mg/l	6.0	1.0*
7	BOD 3 days at 27°C	mg/l	246	16
8	COD	mg/l	616	88
9	Percent Sodium	%	40.11	46.70
10	Total Kjeldal Nitrogen	mg/l	112	11.2
11	Total Residual Chlorine	mg/l	4.0	1.0*
12	Cynaide	mg/l	0.010	0.001*

Amount claimed : **Rs.7,120/-**

(Sample collection charge : Rs. 800/- + Analysis charge : Rs.6320/- = Rs. 7,120/-)

* : Indicates less than

Varalakumi

Deputy Chief Scientific Officer,
District Environmental Laboratory,
Tamil Nadu Pollution Control Board,
Hosur.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(75)

TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Hosur. 27 OCT 2014

REPORT OF ANALYSIS

ROA No : 00336 / DEL / TNPCB / HSR / 2014 - 15, Dated : 24.10.2014

1 DEE Code Assigned : SJ - 138 & SJ - 139

2 Lab Code Assigned : 694 & 695

3 Date and Time of Sample collection : 15.10.2014 at 5.30pm & 5.40pm

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4 Date and Time of Sample receipt : 16.10.2014 at 11.00am

5 Point of collection : ETP Inlet & ETP Outlet

Sl No.	PARAMETER	UNITS	REPORTED VALUE	
			1	2
1	p^H	Number	7.16	7.29
2	Total Suspended Solids	mg/l	540	164
3	Total Dissolved Solids	mg/l	5362	4206
4	Sulphate	mg/l	193	84
5	Chloride	mg/l	700	525
6	Oil and Grease	mg/l	8.0	2.0
7	BOD 3 days at 27°C	mg/l	308	84
8	COD	mg/l	832	416
9	Percent Sodium	%	44.47	43.91
10	Total Kjeldal Nitrogen	mg/l	224	112
11	Total Residual Chloride	mg/l	8.0	4.0
12	Cynaide	mg/l	0.022	0.001*

Amount claimed : **Rs.6,920/-**

(Sample collection charge : Rs. 800/- + Analysis charge : Rs.6120/- = Rs. 6,920/-)

* : Indicates less than

Deputy Chief Scientific Officer,
District Environmental Laboratory,
Tamil Nadu Pollution Control Board,
Hosur.

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

(76)

(2)

ADVANCED ENVIRONMENTAL LABORATORY
TAMILNADU POLLUTION CONTROL BOARD
SALEM - 636 004.

ROA NO.537/AEL – SLM/2017 - 18 Dt.19.02.2018

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	24.01.2018 at 16.50 Hrs
3.	Date and time of receipt at Lab.	25.01.2018 at 02.30 PM
4.	Condition of seal, fastening and Container	Sealed/Fastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No.of Trade Effluent Sample.

PCE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
AEE 501-2018	1774	EO/ ETP Operation	-

Sl. No.	Parameters	Unit	Sample No. 1774/ AEE 501-2018	Test Method
01.	pH at 25°C	Number	6.63	APHA 23rd Edi.2017 4500 - H
02.	Total Suspended Solids at 105°C - at 105°C	mg/l	268	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	2888	APHA 23rd Edi.2017 2540 - C
04.	Chlorides as Cl	mg/l	953	APHA 23rd Edi.2017 4500-CI B
05.	Sulphates as SO_4	mg/l	7	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	Nil	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	340	IS3025 (PT44) 1993 Reaffirmed 2009
08.	COD	mg/l	2240	APHA 23rd Edi.2017 5220

End of Test Report

Checked by

Approved by

Dy. Chief Scientific Officer
Technical Manager

Assistant Director (Lab)

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

(77)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004

Accredited by NABL – (ISO/IEC 17025:2005)

NABL – TC – 6874

ROA NO.614/AEL – SLM/2017 – 18 Dt.27.03.2018

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	06.03.2018 at 17.50 Hrs, 18.15 Hrs
3.	Date and time of receipt at Lab.	07.03.2018 at 04.15 Hrs
4.	Condition of seal, fastening and Container	Unsealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
M 1	2030	Inlet of UASBR	Untreated
M 2	2031	Outlet of ETP	Treated

Sl No.	Parameters	Unit	Sample No. 2030/ M 1	Sample No. 2031/ M 2	Test Method
01	pH at 25°C	Number	3.62	6.88	APHA 23rd Edi.2017 4500 – H
02	Total Suspended Solids at 103°C - at 105°C	mg/l	1850	815	APHA 23rd Edi.2017 - 2540 - D
03	Total Dissolved Solids at 180°C	mg/l	5810	2660	APHA 23rd Edi.2017 2540 - C
04	Chlorides as Cl	mg/l	49	489	APHA 23rd Edi.2017 4500-Cl B
05	Sulphates as SO_4	mg/l	190	111	APHA 23rd Edi.2017 - 4500 E
06	Oil & Grease	mg/l	36	22	APHA 23rd Edi.2017 5520 - D
07	BOD (at 27°C for 3 days)	mg/l	11250	1700	IS3025 (P44) 1993 Reaffirmed 2009
08	COD	mg/l	26800	4480	APHA 23rd Edi.2017 5220

End of Test Report

Checked by

Approved by

Dy. Chief Scientific Officer
Technical Manager

Assistant Director (Lab)

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2005)

ULR-TC687419000000380 F
ULR-TC687419000000381 F

(78)

ROA NO.577/AEL – SLM/2018 – 19 Dt.26.02.2019

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	11.02.2019 at 05.00 PM, 05.15 PM
3.	Date and time of receipt at Lab.	12.02.2019 at 03.45 PM
4.	Condition of seal, fastening and Container	Unsealed /Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
AB 10 Feb/19	1986	Collection tank	Untreated
AB 11 Feb/19	1987	ETP outlet	Treated

Sl. No.	Parameters	Unit	Sample No. 1986/ AB 10 Feb/19	Sample No. 1987/ AB 11 Feb/19	Test Method
01	pH at 25°C	Number	3.92	8.14	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C - at 105°C	mg/l	7050	428	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	20020	2596	APHA 23rd Edi.2017 2540 - C
04.	Chlorides as Cl	mg/l	2149	162	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	370	164	APHA 23rd Edi.2017 - 4500 E
06	Oil & Grease	mg/l	38	12	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	26000	195	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	42000	992	APHA 23rd Edi.2017 5220

- End of Test Report-

Checked by

Dy. Chief Scientific Officer
Technical Manager

Authorized signatory

Assistant Director (Lab)

District Environment Engineer (A/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

(79)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2005)

ULR-TC68741900002735 F
ULR-TC68741900002736 F

LOA NO.501 /AEL – SLM/2019 – 20 Dt.31.01.2020

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	09.01.2020 at 04.30 PM, 04.50 PM
3.	Date and time of receipt at Lab.	10.01.2020 at 02.55 PM
4.	Condition of seal, fastening and Container	Sealed/Fastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos of Trade effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/02/09-01	1935	ETP inlet	-
SSR/03/09-01	1936	ETP outlet	-

Sl. No.	Parameters	Unit	Sample No. 1935/ SSR/02/ 09-01	Sample No. 1936/ SSR/03/ 09-01	Test Method
01.	pH at 25°C	Number	3.79	7.51	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C - at 105°C	mg/l	2168	28	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	12576	812	APHA 23rd Edi.2017 2540 - C
04.	Chlorides as Cl	mg/l	100	105	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	44	8	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	20	<4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	9540	16	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	28000	192	APHA 23rd Edi.2017 5220

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report-

Checked by

N.V. 5/2/20

Dy. Chief Scientific Officer
Technical Manager

Authorized signatory

D. Dharanidharan 5/2/20

Assistant Director (Lab)

District Environmental Engineer (I/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

(80)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2005)

ULR-TC68742000002972 P

ROA NO.549 /AEL – SLM/2019 – 2020 Dt.28.02.2020

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	17.02.2020 at 3.30 PM
3.	Date and time of receipt at Lab.	18.02.2020 at 12.20 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/05/17.02	2160	ETP Outlet	-

Sl. No.	Parameters	Unit	Test Sample Code No. 2160/ SSR/05/17.02	Test Method
01.	pH at 25°C	Number	7.83	APHA 23rd Edi.2017 4500 – H
02.	TSS at 103°C – at 105°C	mg/l	136	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	2356	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	290	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	31	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	8	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	235	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	464	APHA 23rd Edi.2017 5220

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report -

Checked by

N.Vadivu 13/3/20

Dy. Chief Scientific Officer
Technical Manager.

Authorized signatory

13/3/20

Assistant Director (Lab)

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(81)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2005)

ULR-TC68742100000184 F
ULR-TC68742100000185 F

ROA NO.479 /AEL – SLM/2020 – 2021 Dt.25.02.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	29.01.2021 at 02.00 PM - 02.20 PM
3.	Date and time of receipt at Lab.	30.01.2021 at 10.30 AM
4.	Condition of seal, fastening and Container	Sealed/Fastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/11/29.01	2072	ETP Inlet	-
SSR/12/29.01	2073	ETP Outlet	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code Nos.		Test Method
			2072/ SSR/11/29.01	2073/ SSR/12/29.01	
01.	pH at 25°C	Number	3.83	7.85	APHA 23rd Edi.2017 4500 – H
02.	TSS at 103°C – at 105°C	mg/l	2000	260	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	4868	1952	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	325	160	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	209	24	APHA 23rd Edi.2017 - 4500 E
06.	BOD (at 27°C for 3 days)	mg/l	2400	315	IS3025 (P44) 1993 Reaffirmed 2009
07.	COD	mg/l	11040	960	APHA 23rd Edi.2017 5220 -

- End of Test Report -

Checked by

N.V. 9/3/21

Dy. Chief Scientific Officer
Technical Manager.

Authorized signatory

D. Mohanraj 9/3/21

Assistant Director (Lab)

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(82)

ADVANCED ENVIRONMENTAL LABORATORY, TAMILNADU POLLUTION CONTROL BOARD, SALEM 636 004.

Accredited by NABL – (ISO/IEC 17025:2005)

ULR-TC-68742100000488 F
ULR-TC-68742100000489 F

ROA NO.560/ROA/AEL – SLM/2020 – 2021 Dt.30.03.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri
2.	Date and time of collection	11.03.2021 at 01.15 PM to 01.30 PM
3.	Date and time of receipt at Lab.	12.03.2021 at 10.10 AM
4.	Condition of seal, fastening and Container	sealed/fastened Condition in Polythene carbuoy 2.5 lits X 2 Nos
5.	Nature and Number of samples	2 Nos of Trade effluent samples

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/04/11.03	2379	ETP Outlet	-
SSR/05/11.03	2380	ETP Inlet	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code Nos.		Test Method
			2379/ SSR/04/ 11.03	2380/ SSR/05/ 11.03	
01.	pH at 25°C	Number	7.38	4.03	APHA 23rd Edi.2017 4500 – H
02.	TSS at 103°C – at 105°C	mg/l	220	392	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	2944	4128	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	130	250	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	31	211	APHA 23rd Edi.2017 4500 E
06.	BOD (at 27°C for 3 days)	mg/l	75	2500	IS3025 (P44) 1993 Reaffirmed – 2009
07.	COD	mg/l	592	19840	APHA 23rd Edi.2017 5220

Note: -End of Test Report -

Checked by

12/4/21

Dy. Chief Scientific Officer
Technical Manager.

Authorized signatory

D. Mahendran 12/4/21

Assistant Director (Lab).

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(83)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000317 F

ROA NO. 492 /AEL – SLM/2021 – 2022 Dt.23.11.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri
2.	Date and time of collection	13.11.2021 at 04.00 PM
3.	Date and time of receipt at Lab.	13.11.2021 at 07.50 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/08/13.11	1714	ETP Outlet	--

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code No. 1714/ SSR/08/13.11	Test Method
01.	pH at 25°C	Number	7.18	APHA 23rd Edi.2017 4500 – H
02.	TSS at 103°C – at 105°C	mg/l	156	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	1072	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	120	APHA 23rd Edi.2017 4500-ClB
05.	Sulphates as SO_4	mg/l	28	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	<4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	66	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	368	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CNE

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report -

Checked by

Dy. Chief Scientific Officer
Technical Manager.

Authorized signatory

Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (OR)
Tamil Nadu Pollution Control Board
DHARMAPURI

(84)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000578 F
ULR-TC98992100000579 F

ROA NO.553 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	09.12.2021 at 11.15 - 11.30 am
3.	Date and time of receipt at Lab.	10.12.2021 at 10.55 am
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/01/09.12	1952	ETP Inlet	-
SSR/02/09.12	1953	Outlet of anaerobic reactor	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code Nos.		Test Method
			1952/ SSR/01/09.12	1953/ SSR/02/09.12	
01.	pH at 25°C	Number	4.46	6.71	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	3200	1780	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	7968	5124	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	450	350	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	148	101	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	21	12	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	5400	1900	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	21600	8800	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi 2017 4500-CN E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N.V. 30/12/21

Dy. Chief Scientific Officer
Technical Manager

Authorized signatory

D. Mohanambal 24/12/21

Assistant Director (Lab)
Quality Manager

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(85)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

ULR-TC98992100000580 F

Accredited by NABL – (ISO/IEC 17025:2017)

ROA NO.553 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	09.12.2021 at 12.05 pm
3.	Date and time of receipt at Lab.	10.12.2021 at 10.55 am
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/03/09.12	1954	ETP Outlet	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code No. 1954/ SSR/03/09.12	Test Method
01	pH at 25°C	Number	7.24	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	148	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	1032	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	75	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	7	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	102	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	496	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN E

Note: < – Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

30/12/21

Dy. Chief Scientific Officer
Technical Manager.

Authorized signatory

31/12/21

Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

86

ULR-TC98992100000581 P
ULR-TC98992100000582 P

ROA NO.553 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	09.12.2021 at 12.30 - 01.00 PM
3.	Date and time of receipt at Lab.	10.12.2021 at 10.55 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos Ground water Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/04/09.12	1955	Well water (near piniyarur bridge) 11.8925765, 78.3739360	-
SSR/05/09.12	1956	Bore Well (house in North side) 11.8989769, 78.3713495	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample code Nos.		Test Method
			1955/ SSR/04/09.12	1956/ SSR/05/09.12	
01	Turbidity	NTU	2.4	2.9	APHA 23rd Edi. 2017 2130 B
02	pH at 25°C	Number	7.14	7.35	APHA 23rd Edi.2017 4500 – H
03	Total Dissolved Solids at 180°C	mg/l	1144	1928	APHA 23rd Edi.2017 2540 - C
04	Chloride as Cl	mg/l	230	650	APHA 23rd Edi.2017 4500-Cl B
05	Sulphates as SO_4	mg/l	71	10	APHA 23rd Edi.2017 - 4500 E
06	Ph.Compounds	mg/l	<0.05	<0.05	APHA 23rd Edi. 2017 5530 C
07	Nitrate Nitrogen as NO_3	mg/l	0.399	0.497	APHA 23rd Edi. 2017 4500 – NO_3 B
08	Aluminium*	mg/l	<0.006	<0.006	APHA 23rd Edi. 2017 3500 Al B
09	Boron*	mg/l	<0.002	<0.002	APHA 23rd Edi.2017-4500–B-C
10	Total Residual Chlorine*	mg/l	<1	<1	APHA 23rd Edi.2017 4500 Cl B
11	Magnesium as Mg	mg/l	65.6	92.3	APHA 23rd Edi. 2017 2340 C
12	Fluoride as F	mg/l	0.167	0.233	APHA 23rd Edi. 2017 4500-F D

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(87)

13	Total Ammonical Nitrogen	mg/l	2.24	2.8	APHA 23rd Edi. 2017 450 NH_3 C
14	Calcium as Ca	mg/l	68.1	84.1	APHA 23rd Edi.2017 3500 B
15	Iron Total as Fe	mg/l	0.041	0.061	APHA 23rd Edi. 2017 3500-Fe B
16.	Alkalinity as $CaCO_3$	mg/l	440	460	APHA 23rd Edi. 2017 2320 B
17	Manganese*	mg/l	<0.1	<0.1	APHA 23rd Edi. 2017 3550 - Mn
18	Copper	mg/l	<0.2	<0.2	APHA 23rd Edi. 2017 3111. B
19	Zinc	mg/l	<0.1	<0.1	APHA 23rd Edi. 2017 3111. B

Note: 1) < = Indicates Less than Minimum Detectable Limit.
2) *``The parameter marked with an * are not accredited by NABL".

End of Test Report –

Checked by

N. V. [illegible] 30/12/21

Dy. Chief Scientific Officer
Technical Manager.

Authorized Signatory

D. Mohanraj 31/12/21

Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (A/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

88

ULR-TC98992100000583 P

ROA NO.553 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	09.12.2021 at 01.45 PM
3.	Date and time of receipt at Lab.	10.12.2021 at 10.55 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No Ground water Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/06/09.12	1957	Well water (East of ETP area) 11.897111, 78.377065	-

Sl. No.	Parameters	Unit	Test Sample code No. 1957/ SSR/06/09.12	Test Method
01	Turbidity	NTU	2.7	APHA 23rd Edi. 2017 2130 B
02	pH at 25°C	Number	7.43	APHA 23rd Edi.2017 4500 – H
03	Total Dissolved Solids at 180°C	mg/l	3512	APHA 23rd Edi.2017 2540 - C
04	Chloride as Cl	mg/l	1799	APHA 23rd Edi.2017 4500-Cl B
05	Sulphates as SO_4	mg/l	9	APHA 23rd Edi.2017 - 4500 E
06	Ph.Compounds	mg/l	<0.05	APHA 23rd Edi. 2017 5530 C
07	Nitrate Nitrogen as NO_3	mg/l	1.112	APHA 23rd Edi. 2017 4500 – NO_3 B
08	Aluminium*	mg/l	<0.006	APHA 23rd Edi. 2017 3500 Al B
09	Boron*	mg/l	<0.002	APHA 23rd Edi.2017-4500–B-C
10	Total Residual Chlorine*	mg/l	<1	APHA 23rd Edi.2017 4500 Cl B
11	Magnesium as Mg	mg/l	199.2	APHA 23rd Edi. 2017 2340 C
12	Fluoride as F	mg/l	0.372	APHA 23rd Edi. 2017 4500-F D

District Environmental Engineer (AL)
Tamil Nadu Pollution Control Board
DHARMAPURI

(89)

13	Total Ammonical Nitrogen	mg/l	3.36	APHA 23rd Edi. 2017 4500 - NH_3 C
14	Calcium as Ca	mg/l	136.2	APHA 23rd Edi.2017 3500 B
15	Iron Total as Fe	mg/l	0.092	APHA 23rd Edi. 2017 3500-Fe B
16.	Alkalinity as $CaCO_3$	mg/l	560	APHA 23rd Edi. 2017 2320 B
17	Manganese*	mg/l	<0.1	APHA 23rd Edi. 2017 3550 - Mn
18	Copper	mg/l	<0.2	APHA 23rd Edi. 2017 3111. B
19	Zinc	mg/l	<0.1	APHA 23rd Edi. 2017 3111. B

Note: 1) < = Indicates Less than Minimum Detectable Limit.
2) *``The parameter marked with an * are not accredited by NABL".
- End of Test Report –

Checked by

N. Vadivu 30/12/21

Dy. Chief Scientific Officer
Technical Manager.

Authorized Signatory

D. Mohanambigai 31/12/21

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(90)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000641 F
ULR-TC98992100000642 F

ROA NO.564 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	15.12.2021 at 03.30 PM & 03.15 PM
3.	Date and time of receipt at Lab.	16.12.2021 at 01.00 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
DEE/06/15.12	2010	ETP Inlet	-
DEE/05/15.12	2011	Outlet of anaerobic reactor	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code Nos.		Test Method
			2010/ DEE/06/15.12	2011/ DEE/05/15.12	
01.	pH at 25°C	Number	4.19	6.33	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	2612	1340	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	7080	1032	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	400	230	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	17	105	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	24	18	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	2400	660	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	14560	4000	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by
Dy. Chief Scientific Officer
Technical Manager.

Verified by
6/1/22
Chief Scientific Officer
Dy. Quality Manager.

Approved by
6/1/22
Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (AIC)
Tamil Nadu Pollution Control Board
DHARMAPURI

(91)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

ULR-TC98992100000643 F

Accredited by NABL – (ISO/IEC 17025:2017)

ROA NO.564/AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	15.12.2021 at 03.00 PM
3.	Date and time of receipt at Lab.	16.12.2021 at 01.00 PM
4.	Condition of seal, fastening and Containcr	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 Nos. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
DEE/04/15.12	2012	ETP Outlet	-

REPORT

Sl. No.	Parameters	Unit	Test Sample Code No. 2012/ DEE/04/15.12	Test Method
01.	pH at 25°C	Number	7.36	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	884	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	2332	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	220	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	15	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	5	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	180	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	752	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by
Dy. Chief Scientific Officer
Technical Manager.

Verified by
Chief Scientific Officer
Dy. Quality Manager

Approved by
Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (91)
Tamil Nadu Pollution Control Board
DHARMAPURI

(92)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000644 P
ULR-TC98992100000645 P

ROA NO.564 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	15.12.2021 at 01.30 PM to 01.45 PM
3.	Date and time of receipt at Lab.	16.12.2021 at 01.00 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos Well water Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
DEE/01/15.12	2013	Mani House	-
DEE/02/15.12	2014	Nagaraj House	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample code Nos.		Test Method
			2013/ DEE/01/15.12	2014/ DEE/02/15.12	
01	Turbidity	NTU	2.4	12.8	APHA 23rd Edi. 2017 2130 B
02	pH at 25°C	Number	6.97	6.37	APHA 23rd Edi.2017 4500 – H
03	Total Dissolved Solids at 180°C	mg/l	3564	7872	APHA 23rd Edi.2017 2540 - C
04	Chloride as Cl	mg/l	1450	4399	APHA 23rd Edi.2017 4500-Cl B
05	Sulphates as SO_4	mg/l	9	54	APHA 23rd Edi.2017 - 4500 E
06	Ph.Compounds	mg/l	<0.05	<0.05	APHA 23rd Edi. 2017 5530 C
07	Nitrate Nitrogen as NO_3	mg/l	0.508	0.626	APHA 23rd Edi. 2017 4500 - NO_3 B
08	Aluminium*	mg/l	<0.006	<0.006	APHA 23rd Edi. 2017 3500 Al B
09	Boron*	mg/l	<0.002	<0.002	APHA 23rd Edi.2017-4500-B-C
10	Total Residual Chlorine*	mg/l	<1	<1	APHA 23rd Edi.2017 4500 Cl B
11	Magnesium as Mg	mg/l	228	620	APHA 23rd Edi. 2017 2340 C
12	Fluoride as F	mg/l	1.038	1.055	APHA 23rd Edi. 2017 4500-F D

District Environmental Engineer(CAC)
Tamil Nadu Pollution Control Board
DHARMAPURI

13	Total Ammonical Nitrogen	mg/l	2.8	3.36	APHA 23rd Edi. 2017 4500 NH_3 C
14	Calcium as Ca	mg/l	304	721	APHA 23rd Edi.2017 3500 B
15	Iron Total as Fe	mg/l	0.021	0.041	APHA 23rd Edi. 2017 3500-Fe B
16	Alkalinity as $CaCO_3$	mg/l	480	500	APHA 23rd Edi. 2017 2320 B
17	Manganese*	mg/l	<0.1	<0.1	APHA 23rd Edi. 2017 3550 - Mn
18	Copper	mg/l	<0.2	<0.2	APHA 23rd Edi. 2017 3111. B
19	Zinc	mg/l	<0.1	<0.1	APHA 23rd Edi. 2017 3111. B

Note: 1) < = Indicates Less than Minimum Detectable Limit.
2) *``The parameter marked with an * are not accredited by NABL".
- End of Test Report –

Checked by
Dy. Chief Scientific Officer
Technical Manager.

Verified by
6/1/22
Chief Scientific Officer
Dy. Quality Manager.

Approved by
6/1/22
Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000646 P
ULR-TC98992100000647 P

ROA NO.564 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	15.12.2021 at 02.00 PM to 04.30 PM
3.	Date and time of receipt at Lab.	16.12.2021 at 01.00 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	1 No. River water, 1 No.Rain water harvesting pond Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
DEE/03/15.12	2015	Peniyar Bridge (Back side of the plant)	-
DEE/07/15.12	2016	Inside the plant	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample code Nos.		Test Method
			2015/ DEE/03/15.12	2016/ DEE/07/15.12	
01	Turbidity	NTU	13.4	2.0	APHA 23rd Edi. 2017 2130 B
02	pH at 25°C	Number	7.03	7.02	APHA 23rd Edi.2017 4500 – H
03	Total Dissolved Solids at 180°C	mg/l	1156	508	APHA 23rd Edi.2017 2540 - C
04	Chloride as Cl	mg/l	270	110	APHA 23rd Edi.2017 4500-Cl B
05	Sulphates as SO_4	mg/l	9	<5	APHA 23rd Edi.2017 - 4500 E
06	Ph.Compounds	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 5530 C
07	Nitrate Nitrogen as NO_3	mg/l	0.572	0.529	APHA 23rd Edi. 2017 4500 - NO_3 B
08	Aluminium*	mg/l	<0.006	<0.006	APHA 23rd Edi. 2017 3500 Al B
09	Boron*	mg/l	<0.002	<0.002	APHA 23rd Edi.2017-4500-B-C
10	Total Residual Chlorine*	mg/l	<1	<1	APHA 23rd Edi.2017 4500 Cl B
11	Magnesium as Mg	mg/l	66	29	APHA 23rd Edi. 2017 2340 C
12	Fluoride as F	mg/l	0.566	0.400	APHA 23rd Edi. 2017 4500-F D

District Environmental Engineer (I/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

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13	Total Ammonical Nitrogen	mg/l	2.24	<2	APHA 23rd Edi. 2017 4500 NH_3 C
14	Calcium as Ca	mg/l	88	52	APHA 23rd Edi.2017 3500 B
15	Iron Total as Fe	mg/l	0.031	0.051	APHA 23rd Edi. 2017 3500-Fe B
16.	Alkalinity as $CaCO_3$	mg/l	450	250	APHA 23rd Edi. 2017 2320 B
17	Manganese*	mg/l	<0.1	<0.1	APHA 23rd Edi. 2017 3550 - Mn
18	Copper	mg/l	<0.2	<0.2	APHA 23rd Edi. 2017 3111. B
19	Zinc	mg/l	<0.1	<0.1	APHA 23rd Edi. 2017 3111. B

Note: 1) < = Indicates Less than Minimum Detectable Limit.
2) "The parameter marked with an * are not accredited by NABL".
- End of Test Report –

Checked by
Dy. Chief Scientific Officer
Technical Manager.

Verified by
Chief Scientific Officer
Dy. Quality Manager.

Approved by
Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000648 P

ROA NO.564 /AEL – SLM/2021 – 2022 Dt.30.12.2021

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	15.12.2021 at 04.45 PM
3.	Date and time of receipt at Lab.	16.12.2021 at 01.00 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No River water Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
DEE/08/15.12	2017	Peniyar Bridge (Front side of the plant)	-

Sl. No.	Parameters	Unit	Test Sample code No. 2017/ DEE/08/15.12	Test Method
01	Turbidity	NTU	3.4	APHA 23rd Edi. 2017 2130 B
02	pH at 25°C	Number	7.19	APHA 23rd Edi.2017 4500 – H
03	Total Dissolved Solids at 180°C	mg/l	652	APHA 23rd Edi.2017 2540 - C
04	Chloride as Cl	mg/l	145	APHA 23rd Edi.2017 4500-Cl B
05	Sulphates as SO_4	mg/l	<5	APHA 23rd Edi.2017 - 4500 E
06	Ph.Compounds	mg/l	<0.05	APHA 23rd Edi. 2017 5530 C
07	Nitrate Nitrogen as NO_3	mg/l	0.432	APHA 23rd Edi. 2017 4500 – NO_3 B
08	Aluminium*	mg/l	<0.006	APHA 23rd Edi. 2017 3500 Al B
09	Boron*	mg/l	<0.002	APHA 23rd Edi.2017-4500–B-C
10	Total Residual Chlorine*	mg/l	<1	APHA 23rd Edi.2017 4500 Cl B
11	Magnesium as Mg	mg/l	41	APHA 23rd Edi. 2017 2340 C
12	Fluoride as F	mg/l	0.588	APHA 23rd Edi. 2017 4500-F D

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

13	Total Ammonical Nitrogen	mg/l	<2	APHA 23rd Edi. 2017 4500 – NH_3 C
14	Calcium as Ca	mg/l	72	APHA 23rd Edi.2017 3500 B
15	Iron Total as Fe	mg/l	0.031	APHA 23rd Edi. 2017 3500-Fe B
16.	Alkalinity as $CaCO_3$	mg/l	360	APHA 23rd Edi. 2017 2320 B
17	Manganese*	mg/l	<0.1	APHA 23rd Edi. 2017 3550 - Mn
18	Copper	mg/l	<0.2	APHA 23rd Edi. 2017 3111. B
19	Zinc	mg/l	<0.1	APHA 23rd Edi. 2017 3111. B

Note: 1) < = Indicates Less than Minimum Detectable Limit.
2) "The parameter marked with an * are not accredited by NABL".
- End of Test Report –

Checked by
Dy. Chief Scientific Officer
Technical Manager.

Verified by
Chief Scientific Officer
Dy. Quality Manager.

Approved by
Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (C/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100000885 F
ULR-TC98992100000886 F

ROA NO. 664 /AEL – SLM/2021– 22 Dt. 09.02.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	28.01.2022 at 03.20 pm to 03.30 pm
3.	Date and time of receipt at Lab.	29.01.2022 at 10.10 am
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab' Code No.	Point of Collection	Whether Untreated/ Treated
SSR/11/28-01	2298	ETP inlet	--
SSR/12/28-01	2299	Anaerobic reactor outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No.		Method
			2298/ SSR/11/28-01	2299/ SSR/12/28-01	
01.	p^H at 25°C	Number	2.89	5.54	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	2400	1892	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	6996	4030	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	500	250	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	246	216	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	15	9	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	2300	2150	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	12320	9400	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N. Vadivu 11/2/22

Chief Scientific Officer
Dy. Quality Manager.

Authorized Signatory

D. Mohanaraj 11/2/22

Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (A/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

(99)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

ULR-TC98992100000887 F

Accredited by NABL – (ISO/IEC 17025:2017)

ROA NO. 664 /AEL – SLM/2021– 22 Dt. 09.02.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	28.01.2022 at 03.45 pm
3.	Date and time of receipt at Lab.	29.01.2022 at 10.10 am
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/13/28-01	2300	ETP Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No. 2300/ SSR/13/28-01	Method
01.	p^H at 25°C	Number	6.65	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	124	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	916	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	75	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	<5	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	115	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	504	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report -

Checked by

Chief Scientific Officer
Dy. Quality Manager.

Authorized Signatory

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (I/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

(100)

25

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100001138 F
ULR-TC98992100001139 F

ROA NO.768/AEL – SLM/2021 – 2022 Dt.30.03.2022

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	16.03.2022 at 01.00 PM – 01.15 PM
3.	Date and time of receipt at Lab.	17.03.2022 at 11.00 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/03/16.03	2628	ETP Inlet	–
SSR/04/16.03	2629	Anaerobic reactor Outlet	–

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code Nos.		Test Method
			2628/ SSR/03/16.03	2629/ SSR/04/16.03	
01.	pH at 25°C	Number	2.46	6.11	APHA 23rd Edi.2017 4500 – H
02.	Total suspended solids at 103°C – at 105°C	mg/l	1212	564	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	4156	4256	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	500	550	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	34	62	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	32	16	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	4000	525	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	25200	3520	APHA 23rd Edi.2017 5220

- End of Test Report -

Checked by

N. Vishnu 27/4/22

Dy Chief Scientific Officer
Technical Manager.

Authorized signatory

D. Manoranjan 27/4/22

Assistant Director (Lab)
Quality Manager

District Environmental Engineer (A/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

(101)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100001140 F

ROA NO.768 /AEL – SLM/2021 – 22 Dt.30.03.2022

1.	Name and address of the sender	The District Environmental Engineer
		Tamilnadu Pollution Control Board
		Dharmapuri.
2.	Date and time of collection	16.03.2022 at 01.40 PM
3.	Date and time of receipt at Lab.	17.03.2022 at 11.00 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/05/16.03	2630	ETP Outlet	–

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code No. 2630/ SSR/05/16.03	Test Method
01.	pH at 25°C	Number	6.24	APHA 23rd Edi.2017 4500 – H
02.	Total suspended solids at 103°C – at 105°C	mg/l	264	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	916	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	105	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	7	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	144	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	600	APHA 23rd Edi.2017 5220

- End of Test Report-

Checked by

27/4/22

Dy. Chief Scientific Officer
Technical Manager.

Authorized signatory

27/4/22

Assistant Director (Lab).
Quality Manager

District Environmental Engineer (SLM)
Tamil Nadu Pollution Control Board
DHARMAPURI

(102)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992100001007 F
ULR-TC98992100001008 F

ROA NO. 730 /AEL – SLM/2021– 22 Dt. 18.03.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	25.02.2022 at 03.15 PM to 03.25 PM
3.	Date and time of receipt at Lab.	26.02.2022 at 09.00 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/06/25-02	2496	ETP Inlet	--
SSR/07/25-02	2497	Anaerobic reactor Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No.		Method
			2496/ SSR/06/25-02	2497/ SSR/07/25-02	
01.	p^H at 25°C	Number	2.28	5.61	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	1840	1920	APHA 23rd Edi.2017 - 2540 - I
03.	Total Dissolved Solids at 180°C	mg/l	7256	7888	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	600	450	APHA 23rd Edi.2017 4500-Cl
05.	Sulphates as SO_4	mg/l	141	218	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	28	32	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	3400	2100	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	12400	15200	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N.V. 6/5/22

Chief Scientific Officer
Dy. Quality Manager.

Authorized Signatory

D. Manoranjan 6/5/22

Assistant Director (Lab)
Quality Manager

District Environmental Engineer (A/C)
Tamil Nadu Pollution Control Board
Dharmapuri

(103)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

ULR-TC98992100001009 F

Accredited by NABL – (ISO/IEC 17025:2017)

ROA NO. 730 /AEL – SLM/2021– 22 Dt. 18.03.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	25.02.2022 at 03.40 PM
3.	Date and time of receipt at Lab.	26.02.2022 at 09.00 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/08/25-02	2498	ETP Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No. 2498/ SSR/08/25-02	Method
01.	p^H at 25°C	Number	6.23	APHA 23rd Edi.2017 4500 - H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	144	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	724	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	64	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	29	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	114	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	440	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N. Vendiv 6/5/22

Chief Scientific Officer
Dy. Quality Manager.

Authorized Signatory

D. Maheswari 6/5/22

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (AIC)
Tamil Nadu Pollution Control Board
DHARMAPURI

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC898922000000013 F

ROA NO.04 /AEL – SLM/2022 – 23 Dt. 06.05.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	05.04.2022 at 01.15 PM
3.	Date and time of receipt at Lab.	05.04.2022 at 05.30 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/03/05-04	13	ETP Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No. 13/ SSR/03/05-04	Method
01.	p^H at 25°C	Number	6.23	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	240	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	1404	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	335	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	106	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	5	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	315	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	896	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N. Vadivu 6/5/22

Chief Scientific Officer
Dy. Quality Manager.

Authorized Signatory

D. Mohanraj 9/5/22

Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (I/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

(105)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

Accredited by NABL – (ISO/IEC 17025:2017)

ULR-TC98992200000244 F
ULR-TC98992200000245 F

ROA NO. 67 /AEL – SLM/2022– 23 Dt. 24.05.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	09.05.2022 at 01.20 PM – 01.30 PM
3.	Date and time of receipt at Lab.	10.05.2022 at 10.10 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Tradc Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/07/09-05	240	ETP Inlet	--
SSR/08/09-05	241	ETP Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No.		Method
			240/ SSR/07/09-05	241/ SSR/08/09-05	
01.	p^H at 25°C	Number	3.76	6.48	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	2860	196	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	18576	1192	APHA 23rd Edi.2017 2540 - C
04.	Chloridc as Cl	mg/l	7498	165	APHA 23rd Edi.2017 4500-ClˉB
05.	Sulphates as SO_4	mg/l	162	22	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	40.	<4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	9300	70	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	36400	256	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N. Vendiyan 24/5/22
Dy. Chief Scientific Officer
Technical Manager.

Authorized Signatory

D. Mohanraj 24/5/22
Assistant Director (Lab)
Quality Manager.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
Dharmapuri

106

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

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ULR-TC98992200000246 F

ROA NO. 67 /AEL – SLM/2022– 23 Dt. 24.05.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	09.05.2022 at 01.40 PM
3.	Date and time of receipt at Lab.	10.05.2022 at 10.10 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/09/09-05	242	Anaerobic reactor Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No. 242/ SSR/09/09-05	Method
01.	p^H at 25°C	Number	6.14	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	860	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	3344	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	450	APHA 23rd Edi.2017 4500-Cl⁻B
05.	Sulphates as SO_4	mg/l	111	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	11	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	225	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	1520	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

Dy. Chief Scientific Officer
Technical Manager.

Authorized Signatory

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (C/C)
Tamil Nadu Pollution Control Board
DHARMAPURI

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TAMILNADU POLLUTION CONTROL BOARD,
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ULR-TC98992200000565 F
ULR-TC98992200000566 F

ROA NO. 173/AEL – SLM/2022– 23 Dt. 06.07.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	22.06.2022 at 04.35 PM to 04.40 PM
3.	Date and time of receipt at Lab.	23.06.2022 at 04.50 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
BLA/01/22-06	554	ETP Inlet	--
BLA/02/22-06	555	Anaerobic reactor outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No.		Method
			554/ BLA/01/22 06	555/ BLA/02/22 06	
01.	p^H at 25°C	Number	4.88	7.45	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	2652	1184	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	1704	2372	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	445	490	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	74	70	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	Mg/l	28	32	APHA 23rd Edi.2017 – 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	5250	1800	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	19200	14800	APHA 23rd Edi.2017 5220
09.	Total Kjeldahl Nitrogen	mg/l	70.56	77.28	APHA 23rd Edi. 2017 4500 – N_{org} B
10.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N. V. [illegible] 8/7/22

Dy. Chief Scientific Officer
Technical Manager.

Authorized Signatory

D. Mohanambal 8/7/22

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (a)(c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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SALEM – 636 004.

ULR-TC98992200000567 F

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ROA NO. 173/AEL – SLM/2022– 23 Dt. 06.07.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	22.06.2022 at 04.45 PM
3.	Date and time of receipt at Lab.	23.06.2022 at 04.50 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 1 No.
5.	Nature and Number of samples	1 No. of Trade Effluent Sample.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
BLA/03/22-06	556	ETP Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No. 556/ BLA/03/22-06	Method
01.	p^H at 25°C	Number	7.24	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	124	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	824	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	173	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	23	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	Mg/l	4.8	APHA 23rd Edi.2017 – 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	115	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	496	APHA 23rd Edi.2017 5220
09.	Total Kjeldahl Nitrogen	mg/l	21.28	APHA 23rd Edi. 2017 4500 – N_{org} B
10.	Cyanide	mg/l	<0.05	APHA 23rd Edi.2017 4500-CN-E

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

N.V. 8/8/22

Dy. Chief Scientific Officer
Technical Manager.

Authorized Signatory

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

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ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

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ULR-TC98992200001040 F
ULR-TC98992200001041 F

ROA NO.300/TNPCB/AEL – SLM/2022– 23 Dt. 30.08.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	04.08.2022 at 1.40 PM – 1.45 PM
3.	Date and time of receipt at Lab.	05.08.2022 at 10.10 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/01/04-08	1027	ETP Inlet	--
SSR/02/04-08	1028	Anaerobic reactor outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No.		Method
			1027/ SSR/01/04-08	1028/ SSR/02/04-08	
01.	p^H at 25°C	Number	4.60	7.52	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	1200	140	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	1620	2448	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	325	450	APHA 23rd Edi.2017 4500-Cl B
05.	Sulphates as SO_4	mg/l	157	24	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	29	10	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	3900	145	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	12600	1504	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN-E
10.	Total Kjeldahl Nitrogen	mg/l	184.8	67.2	APHA 23rd Edi. 2017 4500 - N_{org} B

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report –

Checked by

Chief Scientific Officer
Dy.Quality Manager.

Authorized Signatory

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (AIC)
Tamil Nadu Pollution Control Board
Dharmapuri

(110)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.

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ULR-TC989922000001042 F
ULR-TC989922000001043 F

ROA NO.300/TNPCB/AEL – SLM/2022 – 23 Dt. 30.08.2022

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	04.08.2022 at 1.30 PM – 1.35 PM
3.	Date and time of receipt at Lab.	05.08.2022 at 10.10 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples.

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
SSR/03/04-08	1029	Aeration outlet	--
SSR/04/04-08	1030	ETP Outlet	--

Parameter to be Analysed:

Sl. No.	Parameters	Unit	Test Sample Code No.		Method
			1029/ SSR/03/04-08	1030/ SSR/04/04-08	
01.	p^H at 25°C	Number	7.82	7.80	APHA 23rd Edi.2017 4500 – H
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	800	32	APHA 23rd Edi.2017 - 2540 - D
03.	Total Dissolved Solids at 180°C	mg/l	2024	1672	APHA 23rd Edi.2017 2540 - C
04.	Chloride as Cl	mg/l	450	290	APHA 23rd Edi.2017 4500-Cl⁻B
05.	Sulphates as SO_4	mg/l	46	32	APHA 23rd Edi.2017 - 4500 E
06.	Oil & Grease	mg/l	7	<4	APHA 23rd Edi.2017 5520 - D
07.	BOD (at 27°C for 3 days)	mg/l	108	30	IS3025 (P44) 1993 Reaffirmed 2009
08.	COD	mg/l	912	224	APHA 23rd Edi.2017 5220
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edi.2017 4500-CN- E
10.	Total Kjeldahl Nitrogen	mg/l	38.08	3.36	APHA 23rd Edi. 2017 4500 - N_{org} B

Note: < = Indicates Less than Minimum Detectable Limit.

- End of Test Report -

Checked by

Chief Scientific Officer
Dy Quality Manager.

Authorized Signatory

Assistant Director (Lab).
Quality Manager.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(111)

ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.
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TC 9899

ROA NO.411/TNPCB/AEL – SLM/2022– 23 Dt. 30.09.2022
ULR-TC98992200001533
ULR-TC98992200001534

1.	Name and address of the sender	The District Environmental Engineer Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	20.09.2022 at 4.35 PM to 4.40 PM
3.	Date and time of receipt at Lab.	21.09.2022 at 4.50 PM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade Effluent Samples
6.	Date of Analysis	21.09.2022 - 30.09.2022

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
BLA/17/20-09	1504	ETP Inlet	-
BLA/18/20-09	1505	Anaerobic tank outlet	-

TEST REPORT

Sl. No.	Parameters	Unit	Test Sample Code Nos.		Method
			1504/ BLA/17/ 20-09	1505/ BLA/18/ 20-09	
01.	p^H at 25°C	Number	4.53	7.55	APHA 23rd Edn 2017 (4500 H+)
02.	Total Suspended Solids at 103°C – at 105°C	mg/l	2600	460	APHA 23rd Edn 2017 (2540 -D)
03.	Total Dissolved Solids at 180°C	mg/l	628	2988	APHA 23rd Edn.2017 (2540 C)
04.	Chloride as Cl	mg/l	260	725	APHA 23rd Edn.2017 (4500 Cl B)
05.	Sulphates as SO_4	mg/l	<5	39	APHA 23rd Edn.2017 (4500 SO4-E)
06.	Oil & Grease	mg/l	8	10	APHA 23rd Edn.2017 (5520 B)
07.	BOD (at 27°C for 3 days)	mg/l	1230	168	IS 3025 (Part-44)
08.	COD	mg/l	4480	1440	APHA 23rd Edn 2017 (5220 B)
09.	Cyanide	mg/l	<0.05	<0.05	APHA 23rd Edn.2017 (4500-CN E)
10.	Total Kjeldahl Nitrogen	mg/l	172	146.72	APHA 23rd Edn. 2017 (4500-Norg-B)

Note: < = Indicates Less than Minimum Detectable Limit.
* Results relate only to the tested samples.
** The report shall not be reproduced except in full without approval of the laboratory can provide assurance that parts of a report are not taken out of context.

Checked by

21/10/22

Chief Scientific Officer
Dy.Quality Manager.

Authorized Signatory

21/10/22

Assistant Director (Lab).
Quality Manager.

– End of Test Report –

Page No.1 of 1

District Environmental Engineer (i/c)
Tamil Nadu ... Control Board
DHARMAPURI

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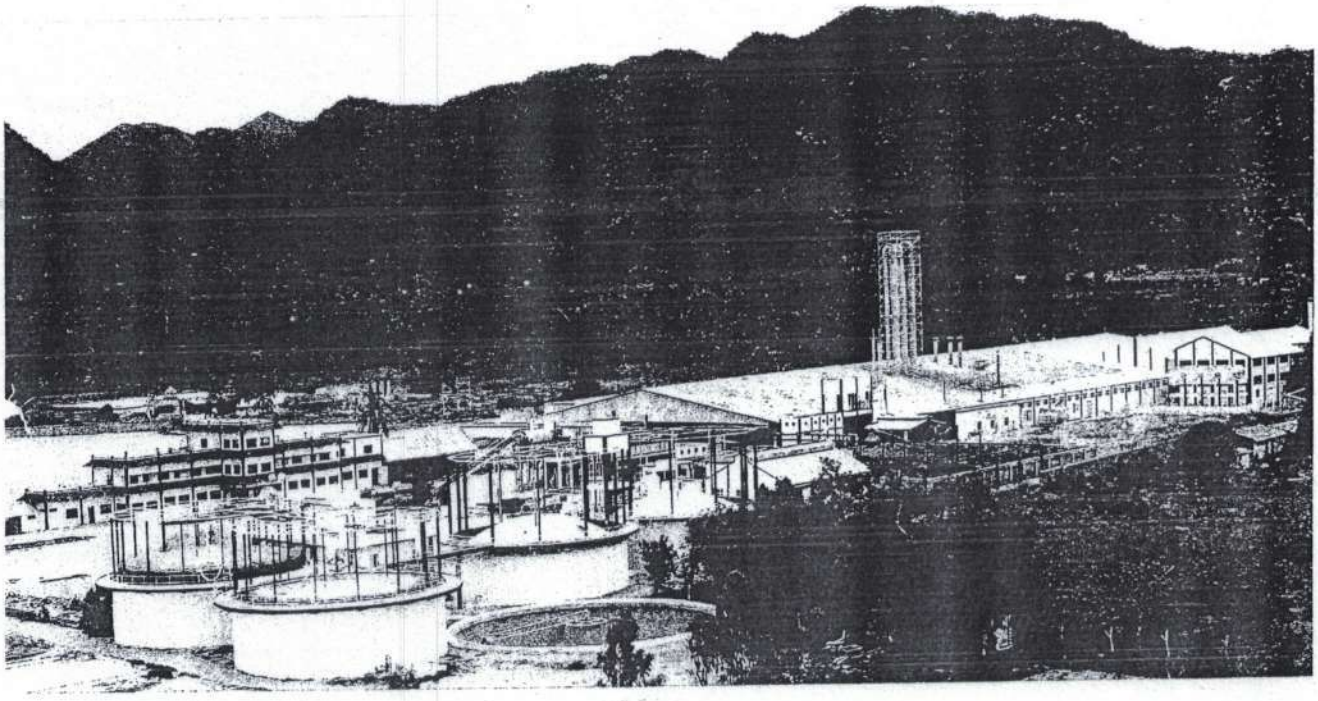
ADEQUACY REPORT FOR ENHANCEMENT OF PRODUCTION CAPACITY FOR M/s VARALAKSHMI STARCH INDUSTRIES PVT. LTD.,

Pappireddipatti village, Dharmapuri District, Tamil Nadu



Prepared by

CENTRE FOR ENVIRONMENTAL STUDIES

ANNA UNIVERSITY CHENNAI

CHENNAI-600025

MARCH 2009

District Environmental Engineer (a/c)

Tamil Nadu Pollution Control Board

/TRUE COPY/

For Varalakshmi Starch Industries (P) Ltd

(113)

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District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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(115)

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District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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LIST OF FIGURES

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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ADEQUACY REPORT FOR ENHANCEMENT OF PRODUCTION CAPACITY FOR VARALAKSHMI STARCH INDUSTRIES PVT. LTD.

1. INTRODUCTION

Tapioca starch production is one of the major food industries in Tamil Nadu. M/s Varalakshmi Starch Industry is an agro-based industry engaged in manufacture, export of native tapioca starch (ISI marked) and modified starches of international standards. Tapioca starch and modified starches are manufactured by crushing 480 MT of tapioca root per day in the existing plant located at Pappireddipatti village, Dharmapuri District, Tamil Nadu. The raw material namely, tapioca, is an agricultural product which is seasonally available. The unit has peak season of 120 days (November to February), lean season of 60 days (October & March) and off-season of 180 days (April to September) in a year.

M/s Varalakshmi starch industry has recently proposed to enhance its production capacity to run the plant continuously as well as to give regular employment to its employees. It is proposed to increase the crushing capacity by 120 MT of tapioca root per day. It has also been proposed to manufacture maize based food grade starch with a crushing capacity of around 375 MT of maize per day in the existing tapioca starch plant premises by utilizing the existing facilities such as man power, electric power, treated water disposal facilities, and Effluent Treatment Plant (ETP) in the off season period of tapioca.

M/s Varalakshmi starch industry had requested the Centre for Environmental Studies (CES), Anna University to conduct a study and prepare a report on the adequacy of the proposed plant to cater to the increased pollution load arising due to change in production capacity and introduction of additional products. The studies were carried out by Dr. S. Amal Raj (Assistant Professor) under the guidance of Dr. K. Thanasekaran (Professor) of CES in November, 2008 – January, 2009.

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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It was primarily based on the information provided by Varalakshmi Starch Industry during discussions with engineering staff on the production processes, waste generation, effluent characteristics and verification of the same based on process chemistry and records. For critical cases, primary data were also collected.

The details of products now manufactured as per TNPCB Consent Order No. DEE/HSR/2555/W/DMP/2007 dated 29.06.2007 and that proposed to be manufactured after expansion are presented in Table 1.

Table 1: Details of Products manufacturing capacity

Sl. No.	Description	Mean Production Capacity MT/month	
		Existing	After Expansion*
	Main Products		
1.	Native Tapioca Starch	1,620	900
2.	Modified Starches-wet process :		
i	Oxidised Starch	1,000	2,000
ii	Cationic Starch	50	300
iii	Spray Starch	50	300
3.	Modified Starches-dry process :		
i	Acetylated Starch	300	300
ii	Yellow Dextrin	150	150
iii	White Dextrin	150	150
iv	Carboxy Methyl Starch	100	100
v	Pre-geletinised Starch	----	300
Total		**3,420**	**4,500**
4.	Tapioca Thippi	1,730	2,500
5.	**Maize Starch**	----	7,000

Note: *Data furnished by the Industry

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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The details of raw materials and chemicals requirement per month for the existing plant and that after expansion have been illustrated in Tables 2 and 3 respectively.

Table 2: Raw materials requirement for the existing plant and that after expansion

Materials	Existing		Expansion	
		MT/month		MT/month
Tapioca	Conversion in to Native Tapioca Starch	6,480	Conversion in to Native Tapioca Starch/Sago	3,600
	Conversion in to Modified Starches : (wet process) Oxidised Starch, Cationic Starch & Spray Starch	4,850	Conversion in to Modified Starches : Oxidised Starch, Cationic Starch & Spray Starch - wet process	10,400
	Conversion in to Modified Starches : (dry process) Acetylated Starch, Yellow Dextrin, White Dextrin & Carboxy Methyl Starch	3,070	Conversion in to Modified Starches : AcetylatedStarch, Yellow & White Dextrins, Carboxy Methyl Starch, Pre-geletinised Starch & all other Modified Starches - dry process	4,000
TOTAL		**14,400**	**TOTAL**	**18,000**
Maize		NIL	Conversion in to Maize Starch	11,000

Note: Calculated on the basis of 27% Starch content in Tapioca Tuber and around 62% Starch content in Raw Maize

The industry has stated that only one wet based modified starch is produced at a time and all the chemicals listed in the table are not used simultaneously. Depending upon the product chosen, the type of chemicals used varies. Among the various types of modified starch, oxidised starch consumes maximum amount of chemicals.

District Environmental Engineer (i/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

Table 3: Chemical requirement for the existing plant and that after expansion

List of all materials Chemicals : (Inorganic)	Principal use	Amount in MT/Month	
		Existing	After expansion
1. Caustic Soda Lye (Sodium Hydroxide)	For Oxidised Starch, Cationic Starch & Spray Starch	21.00	60.00
2. Hydro Choric Acid	For Oxidised Starch, Spray Starch Acetylated Starch & Dextrins	20.00	30.00
3. Sodium Hypo Chlorite	For Oxidised Starch	300.00	500.00
4. Sulphur	For Native Tapioca Starch	0.90	1.20
5. Nitrogen (Food to Reactors)	---	---	15.00
6. Sodium Mono Chloro Acetate	For Carboxy Methyl Starch	15.00	25.00
7. Cationic Reagent	For Cationic Starch	2.00	40.00
8. Acetic Anhydrite	For Acetylated Starch	4.00 kL	1.50 kL
9. Caustic Soda Flakes	For Carboxy Methyl Starch	1.50	1.50
10. Sodium Phosphate	For Acetylated Starch	1.00	1.00
11. Calcium Chlorite	For Water Treatment	1.00	1.00
12. Ferrous Sulphate	For Water Treatment	0.60	0.60
13. Bleaching Powder	For Water Treatment	1.00	1.00
14. Hydrated Lime	For Water Treatment	8.00	10.00
15. Sulphur	For Maize Starch	____	10.00
TOTAL		372 MT/ month + 4 kL	696.3 MT/ month + 1.5 kL

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
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2. EXISTING MANUFACTURING PROCESS

2.1 Native tapioca starch

Extraction of starch from tapioca is a simple and straightforward process. The separation of starch granules from the tuber in a pure form is essential in the manufacture of tapioca starch. The granules are locked in cells together with other constituents of the protoplasm (proteins, soluble carbohydrate, fats etc.) and which can only be removed by a purification process in aqueous phase. The roots of tapioca should be processed within 48 hours after harvesting. The essential factor in the production of food grade tapioca starch is that the whole process, from harvesting the roots to completion of the final drying, should be carried out in the shortest time possible since deterioration sets in from the time of root extraction and proceeds throughout the process. The process flow diagram for the manufacture of starch from tapioca is presented in Fig.1.

The step by step procedure of manufacturing native tapioca starch and sago as followed in the industry is given below:

Step I:

Fresh tapioca tubers received at the factory are passed through a dry peeler, which removes the outermost skin and all soil particles adhering to the tapioca tubers. This dry peeling and pre-cleaning not only improve the quality of end product but also reduces the consumption of water in the washing process thereby reducing the load on ETP to a large extent (95% sand and mud removed).

Step II:

The pre-cleaned tapioca tubers are peeled and washed in an automatic washer using the recycled treated effluent obtained from primary sludge settling tank (remaining 5% sand and mud removed).

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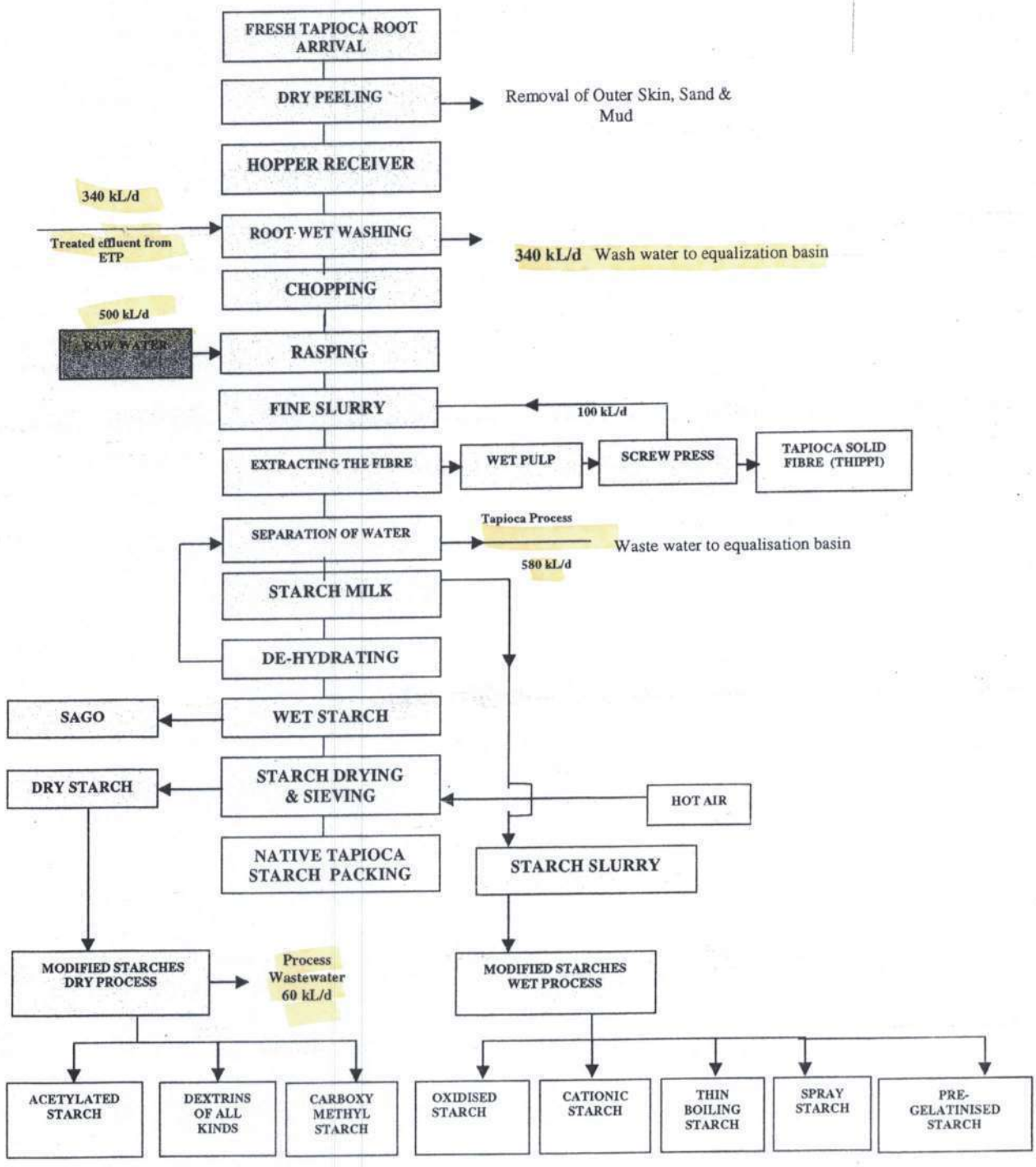

Fig.1: The process flow diagram for the manufacture of native tapioca starch (existing)

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Step III:

Washed tapioca tubers are fed in to a chopper where the tapioca tubers are chopped in to small bits, This initial chopping reduces the load on the raspers as well as reduces the water requirement in the rasping process, as the Tapioca Tubers are fed into the raspers for rasping in disintegrated form requiring less water for crushing.

Step IV:

The finely chopped tapioca tubers are fed in to raspers where the tapioca tubers are crushed in to fine slurry. The raspers used in the process employ modern technology using serrated high tensile rasper blades. By this method the requirement of water is brought down considerably as the rasper Blades used here are able to crush the tapioca tubers into fine slurry with less water. The raspers are so designed that they are able to crush the tapioca tubers in to micro particles so that the Tapioca Starch recovery will be high and the water usage also less so that the load on the Separators at later stage of manufacturing would be reduced.

Step V:

Finely rasped tapioca slurry is passed through pulp extractors where the pulp (Thippi) is extracted from the tapioca slurry by adopting centrifugal separation method. The pulp separated here is passed through screw press where most of the remaining water from the tapioca pulp (Thippi) is removed. The tapioca pulp which comes out of the screw press is of semi solid consistency.

Step VI:

The tapioca starch milk obtained in the previous section is passed through separators which remove the process water, fruit water contained tapioca tuber and immatured starch from the starch milk employing centrifugal principle. Tapioca starch milk coming out of

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these separators is more refined and concentrated. Separated water is the only wastewater.

Step VII:

The concentrated tapioca starch milk is passed through centrifugal de-hydrators where water from the tapioca starch is removed by centrifugal method. The resultant wet tapioca starch will be in small lumps with about 30-35 % moisture. The process water removed from the tapioca starch by de-hydrators is passed to separators inlet (Step VI) to recover escaped tapioca starch particles.

Step VIII:

The lumps of wet tapioca starch obtained from the de-hydrators are passed through a disintegrator to convert it in to fine tapioca starch powder.

Step IX:

The powdery wet tapioca starch from the disintegrators is fed in to flash dryers which dry the tapioca starch automatically using hot air generated from hot air furnace to reduce the moisture in the finished tapioca starch to about 12% - 14%.

Step X:

The dried native tapioca starch powders obtained from the flash dryers is passed through feeder and sifters and gets bagged automatically.

2.2 Manufacturing process for modified Starch – wet process

The raw material namely tapioca root is seasonally available one. So the tapioca root crushing period of the plant is November, December, January and February (4 months), which is considered as peak season; October and March (2 months), which is considered as

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lean season every year. In the remaining period April-September, conversion of dried native tapioca starch or stored semi-finished tapioca starch into modified starches is being undertaken in the plant.

2.2.1 Manufacturing process of Oxidised Starch

Step I : Concentrated starch slurry taken for further chemical treatment.

Step II : Addition of the required Chemical(s) – Caustic Soda Lye, Hydrochloric Acid, Sodium Hypo Chlorite with Starch Slurry.

Step III : The Starch Slurry and Chemical(s) blended well, by using Agitator(s).

Step IV : Allowed around 10 hours for further reaction.

Step V : The Chemically reacted Modified Starch Slurry converted in to Dry Modified Starch powder by using Flash Drier(s).

Step VI : The dry Modified Starch Powder-Oxidised Starch obtained from the Flash Dryer(s) get sieved and bagged.

The process flow diagram for the manufacturing of oxidized starch is shown in Fig. 2.

2.2.2 Manufacturing process of Cationic Starch

Step I : Preparation of starch slurry.

Step II : Adding of required Chemical(s) – Caustic Soda Lye, Cationic Reagent with Starch Slurry.

Step III : The Starch Slurry and Chemical(s) blended well, by using Agitator(s).

Step IV : Allowed around 20 hours for further reaction.

Step V : The chemically reacted Modified Starch Slurry converted in to Dry Modified Starch powder by using Flash Drier(s).

Step VI : The dry Modified Starch Powder-Cationic Starch obtained from the Flash Dryer(s) gets sieved and bagged.

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The process flow diagram for the manufacturing of Cationic Starch is shown in Fig. 3.

2.2.3 Manufacturing process of Spray Starch

Step I : Preparation of starch slurry.

Step II : Addition of required Chemical(s) – Caustic Soda Lye and Hydrochloric Acid with Starch Slurry.

Step III : The Starch Slurry and Chemical(s) mixed well, by using Agitator(s).

Step IV : Allowed around 5 hours for further reaction.

Step V : The Chemically reacted Modified Starch Slurry converted in to Dry Modified Starch powder by using Flash Drier(s).

Step VI : The dry Modified Starch Powder-Spray Starch obtained from the Flash Dryer(s) gets sieved and bagged.

The process flow diagram for the manufacturing of Spray Starch is shown in Fig. 4.

2.3 Modified Starch - dry process

2.3.1 Carboxy Methyl Starch

Step I : Taking Dry Native Tapioca Starch.

Step II : Addition of required Chemical(s) – Sodium Mono Chloro Acetate, Caustic Soda Flakes with Dry Starch

Step III : The Dry Starch and Chemical(s) blended well, by using Ball Mill Mixer(s).

Step IV : Quality Control carrying out.

Step V : The Modified Starch Powder-Carboxy Methyl Starch get sieved and bagged.

The process flow diagram for the manufacturing of Carboxy Methyl Starch is shown in Fig. 5.

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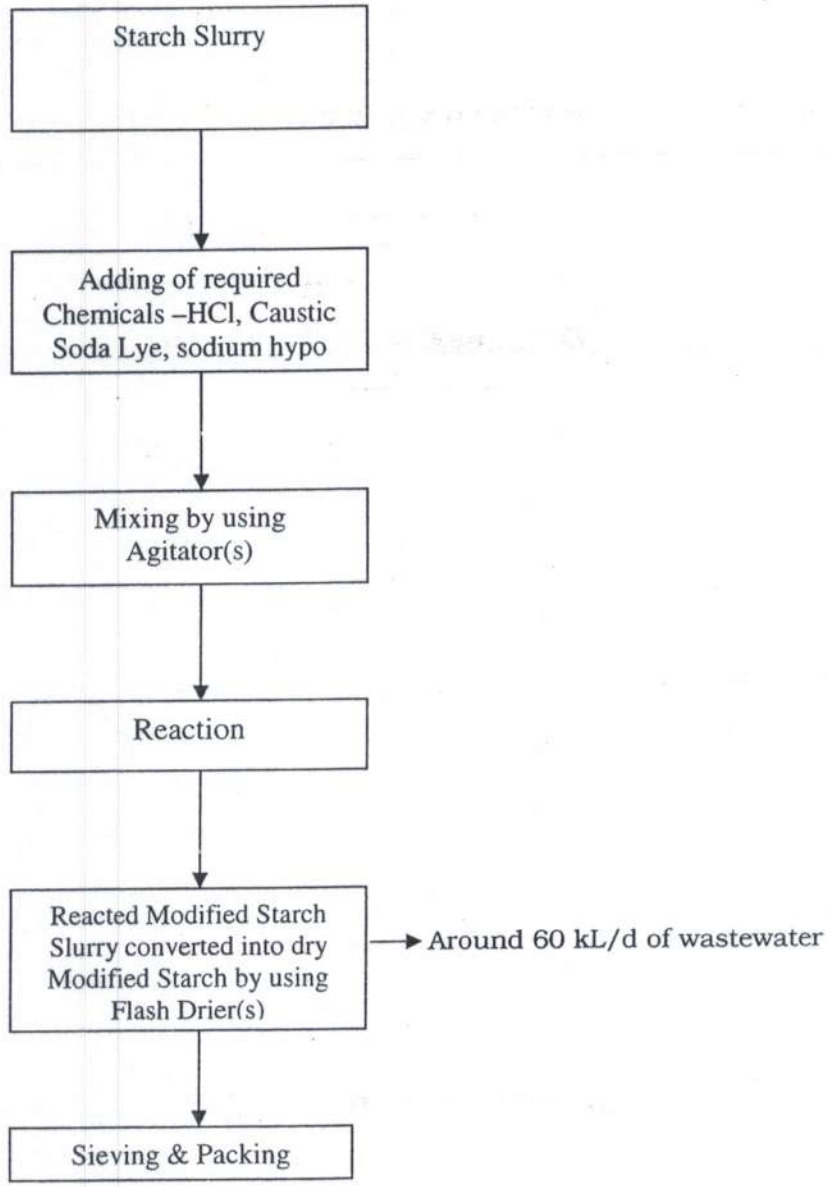

Fig.2. Flow Diagram of Oxidized Starch Manufacturing Process

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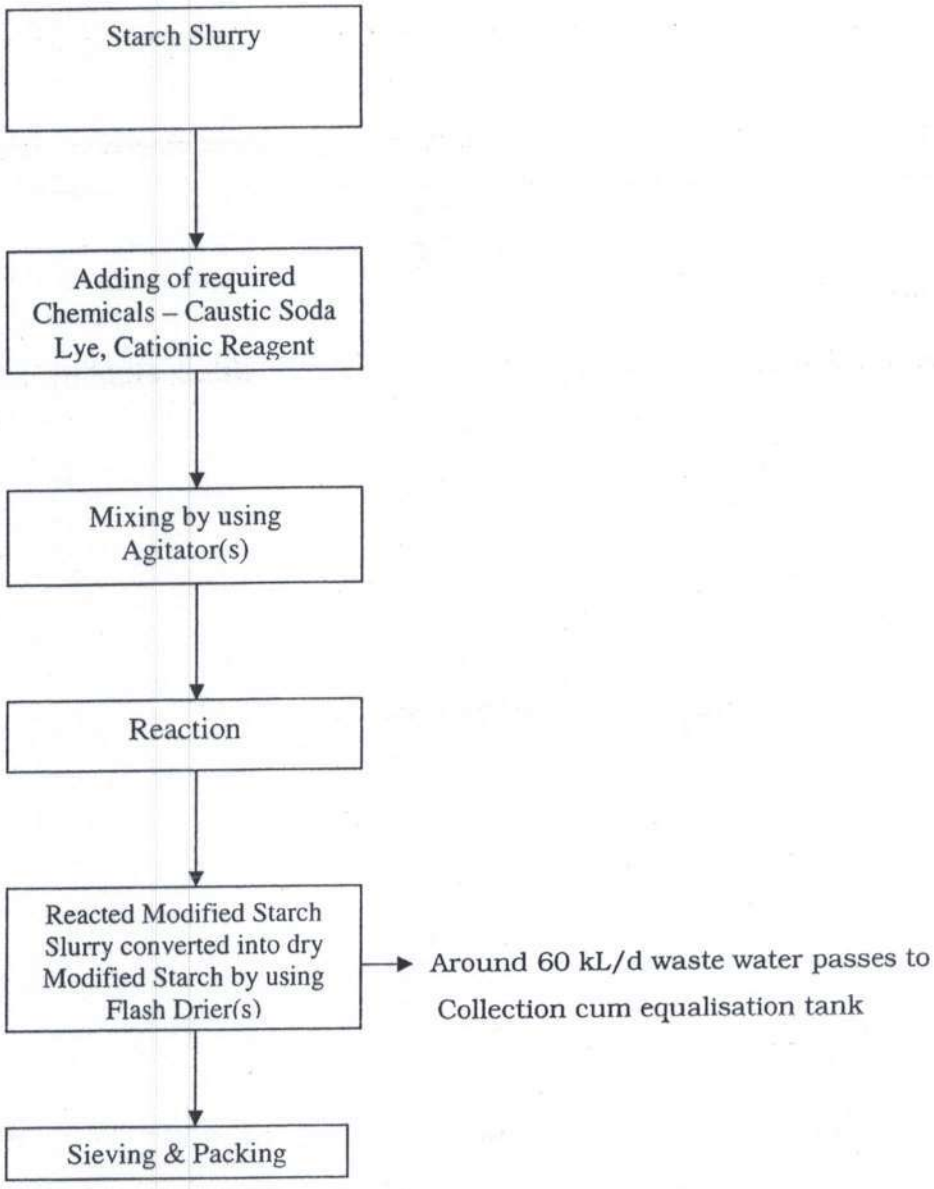

Fig.3. Flow Diagram of Cationic Starch Manufacturing Process

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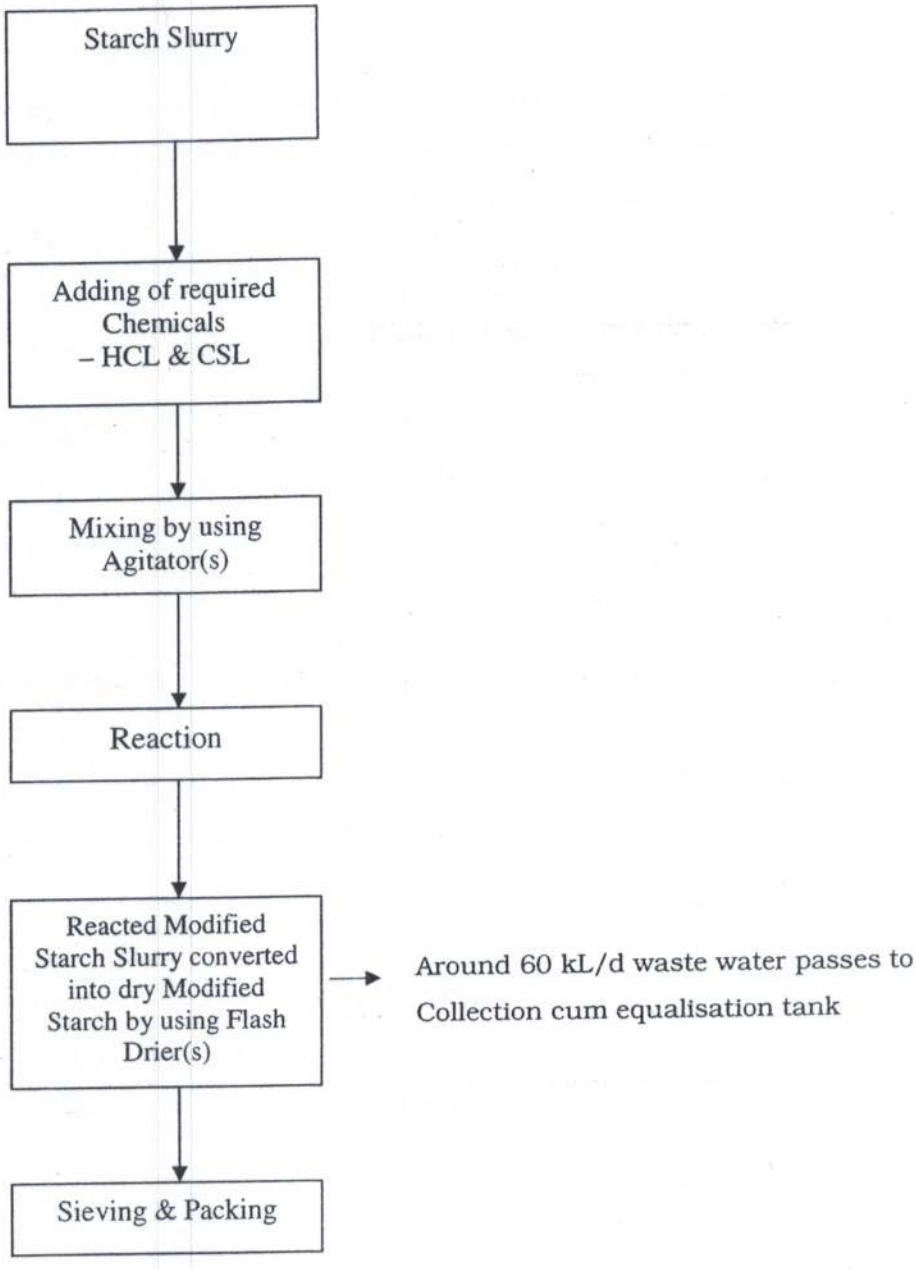

Fig.4. Flow Diagram of Spray Starch Manufacturing Process

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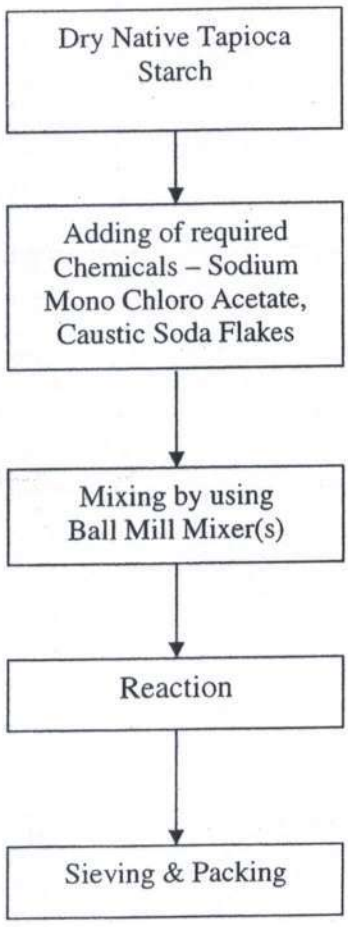

Fig.5. Flow Diagram of Carboxy Methyl Starch Manufacturing Process

2.3.2 Manufacturing process of Acetylated Starch

Step I : Taking Dry Native Tapioca Starch.

Step II : Addition of required Chemical(s) – Caustic Soda Flakes, Hydrochloric Acid, Acetic Anhydrite, and Sodium Phosphate with Dry Starch.

Step III : Sieving using Sieve Machine(s).

Step IV : Quality Control

Step V : The Modified Starch Powder-Acetylated Starch gets bagged.

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The process flow diagram for the manufacturing of Acetylated Starch is shown in Fig. 6.

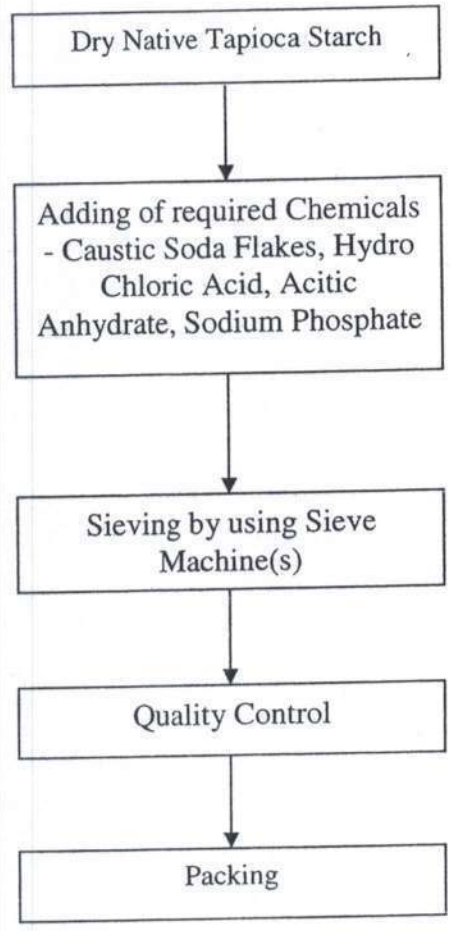

Fig.6. Flow Diagram of Acetylated Starch Manufacturing Process

2.3.3 Manufacturing process of Dextrins (White & Yellow)

Step I : Taking Dry Native Tapioca Starch.

Step II : Addition of required Chemical(s) – Hydrochloric Acid with Dry Starch.

Step III : Roasting with low / high temperature carrying out to obtain White/ Yellow Dextrins.

Step IV : Reducing the temperature by using Cooling Vessels.

Step V : Sieving by using Sieve Machine(s).

Step VI : Quality Control.

Step VII : The Modified Starch Powder-White & Yellow Dextrins get bagged.

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The process flow diagram for the manufacturing of Dextrins (White & Yellow) is shown in Fig. 7.

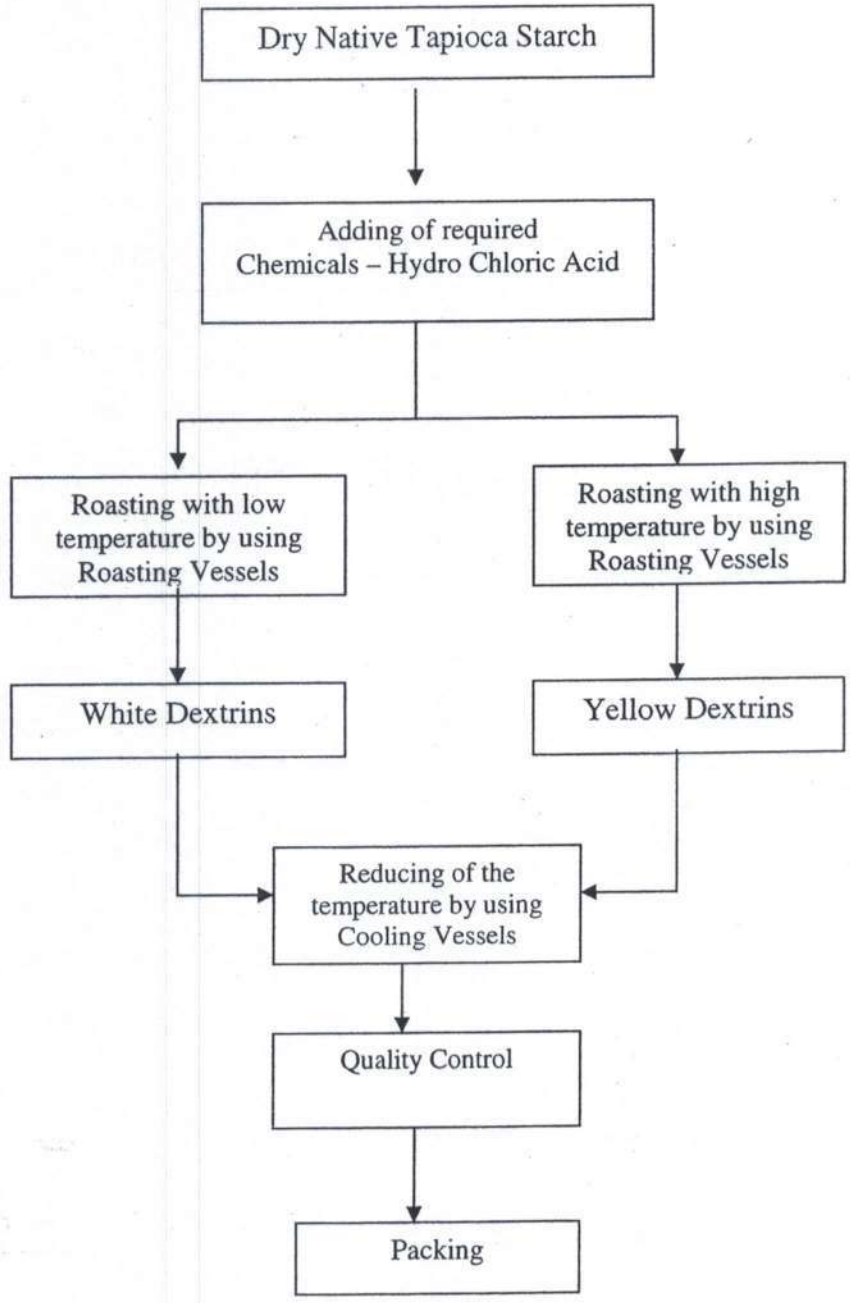

Fig.7. Flow Diagram of Dextrins (White & Yellow) Manufacturing Process

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3. PRODUCTION PROCESS AFTER EXPANSION

In addition to the existing crushing of tapioca root of 480 MT/d, it is proposed to add an additional crushing capacity of 120 MT/d of tapioca root per day. So the future crushing capacity of tapioca root would be around 600 MT/d. The details of the additional machinery for increasing the tapioca crushing are given in Table 4. It has also been proposed to manufacture maize based food grade starch with a crushing capacity of around 375 MT/d of maize per day in the existing tapioca starch plant premises during the tapioca off season (April – September) by using existing facilities such as man power, connected electric power, Administration, other marketing set up, Effluent Treatment Plant and treated water utilization facilities for irrigation.

Table 4. Details of additional machinery for increasing the tapioca crushing

S. No	Description	Quantity in nos.		
		Existing	Additional	Total
1	Root washer pit	2	2	4
2	Inclined root conveyor belt	1	1	2
3	Root chopper	1	1	2
4	Root rasper	4	3	7
5	Coarse extractor	18	5	23
6	Fine extractor	8	8	16
7	Final extractor	6	6	12
8	Separator	3	2	5
9	Dehydrating centrifuge	4	2	6
10	Conveyor belt	1	1	2
11	Paddle mixing conveyor	1	1	2
12	Flash Dryer duct	1	2	3
13	Drying cyclone	2	1	3
14	Starch shifting and bagging cabinet	6	3	9
15	Heater furnace	2	1	3
16	Oil burner	2	1	3
17	Hot air blower	2	1	3
18	Drying blower	2	1	3
19	Cooling blower	1	1	2

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3.1 PROCESS DETAILS FOR MAIZE STARCH PRODUCTION.

The process flow diagram for the manufacture of starch from maize is presented in Fig.8.

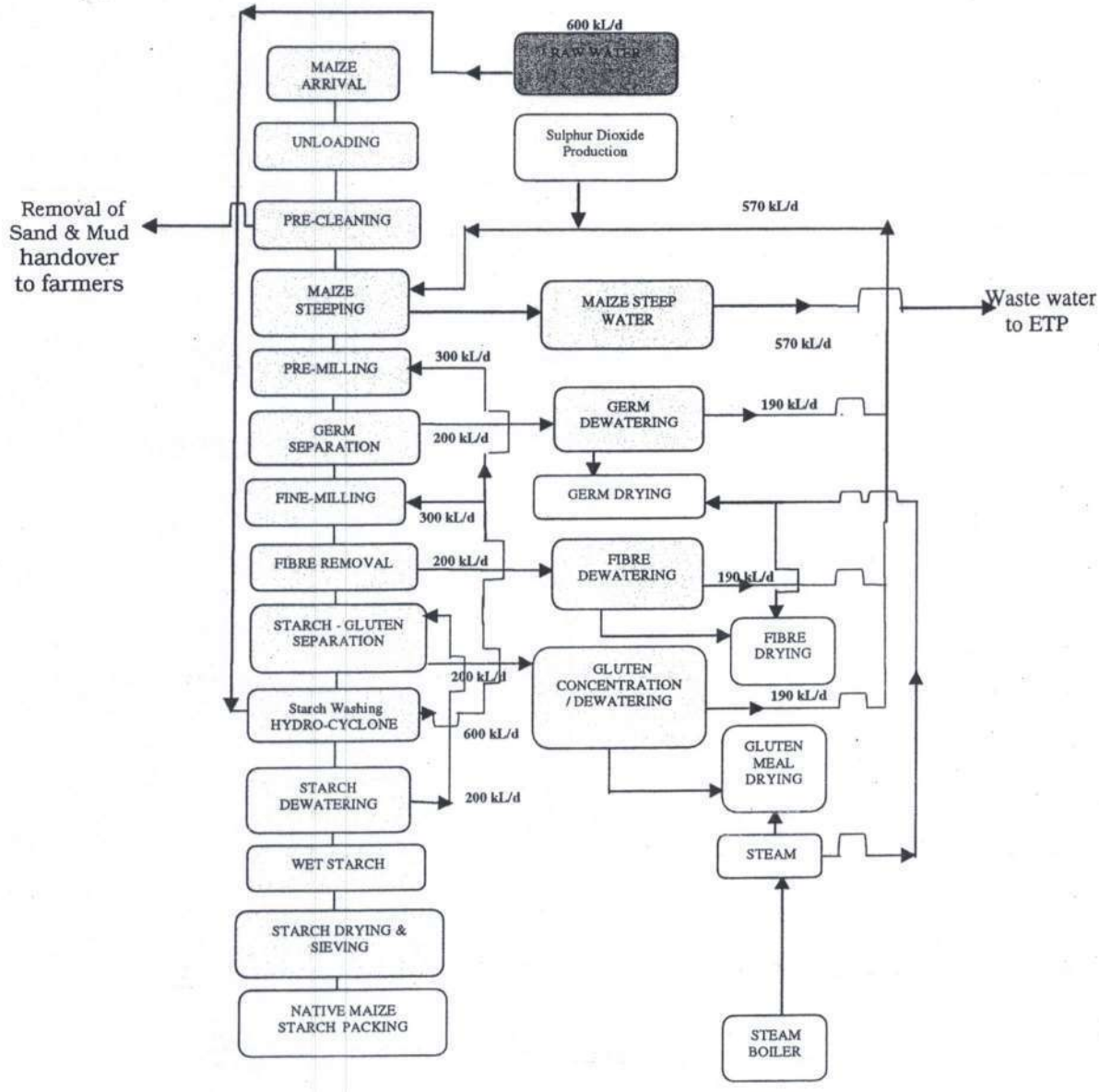

Fig.8. The process flow diagram for the manufacture of starch from maize

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The Proposed stage wise procedure involved in maize starch production is detailed as under.

Unloading and Cleaning

Raw Maize received from farmers is unloaded and it is cleaned to remove solid impurities like cob, chaffs, sand and other undesirable foreign matter. The solid waste items and packing material are returned to the farmers and then cleaned maize is taken for process or stored into silos.

Maize Steeping

The cleaned maize is softened by steeping process by using recycled process water for duration of 40 to 60 hours at a temperature of 48 to 52°C. In this process the maize absorbs water and become soft to enable easy separation of germ. After steeping, the water from the steeping tanks is fed into bio methanation reactors to produce bio gas and to reduce the BOD and COD in the effluent.

Pre-Milling and Germ Separation

The softened maize is subjected to coarse grinding/pre-milling where the maize is coarsely ground to release the germs without damaging them. As the germ is much light in density than the broken maize kernels, the germ is easily separated by using cyclones. The germ coming out of germ separating cyclones sent to dewatering section where the water from the germ is separated and sent back for steeping processing. The wet germ from the germ separation section is then dried in a germ drier and disposed off as a byproduct.

Fine Milling and Fibre Separation

The coarsely ground maize kernels free from germs are then ground through fine mill, finally to liberate maize slurry containing fiber, starch and gluten. The fiber is removed from the slurry by DSM Screen. The fiber thus removed is sent to fiber de-watering section where the free water from the wet fiber is removed and recycled into steeping processing. The fiber after reducing of water is then dried and disposed off as a byproduct.

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Gluten Separation

The mixture of gluten and starch slurry free from fiber and germ is sent to primary gluten separator. Here the gluten is of lower density than starch and so gluten slurry and starch slurry both are separated. The gluten slurry separated in this section is sent to Gluten concentrator (gluten thickening separator) and concentration section where the excess water is removed from the gluten and the water recycled into steeping process. The concentrated gluten cake from vacuum belt filter is sent to gluten drying section where it is dried as a byproduct.

Starch Slurry Washing and Dewatering

The starch milk after releasing the gluten is then thoroughly washed with the help of fresh water through 12 stage Hydro cyclones. After washing, the process water is removed from the starch milk and the water is recycled into milling section processing.

Starch Dewatering

The concentrated starch milk is passed through De-Hydrating Centrifuge for reducing moisture content upto 30% - 35%. The outlet water contains small portion of starch and it is recycled to starch slurry dewatering section.

Starch Drying

The wet starch /starch cake obtained from dewatering section is then dried in flash drier by using hot air. The dry starch obtained from the starch drier is sieved and then fine starch powder is packed and disposed off as finished product.

The crushing capacity and the various products likely to be generated for the proposed maize plant are presented in the Table 5.

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Table 5: The crushing capacity and product generation for the proposed maize plant

Sl.No.	Product	Quantity (MT/d) (+/- 2%)
1.	Maize crushing (raw material)	375.0
2.	Maize Starch production (product)	232.5
	By Products	
3.	Germ	30.0
4.	Gluten	22.5
5.	Husk (Fibre)	48.75
6.	Moisture	37.5
	Process waste	
7.	Sand & Silicon along with Maize	3.75
Total (2 to 7)		375
Generation of wastewater during process		580.0 kL/d

3.2 MANUFACTURING PROCESS FOR PRE- GELATINIZED STARCH

Step I : Preparation of starch slurry

Step II : The starch slurry is passed through drum drier which is heated to a temperature of 150 °C.

Step III : The dried starch obtained from the above process is removed, powdered and packed for commercial use.

The process flow diagram for pre-gelatinized starch is shown in Fig.9.

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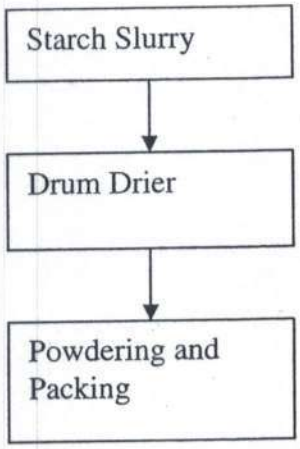

Fig.9: Flow diagram of pre-gelatinized starch process

4. MATERIAL BALANCE

The material balance for the conversion of native tapioca and maize starch are given in Tables 6 and 7 respectively.

Table 6: Material balance for conversion of Tapioca Root to Native Tapioca starch

Sl.No.	Product	Quantity (%) (+/- 3%)
1.	Native Tapioca Starch	25
2.	Tapioca Thippi	10
3.	Fruit Water (including volatile solids)	62
4.	Outer Skin, Sand, Mud	3
Total		**100**

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Table 7: Material balance - conversion of maize to starch

Sl.No.	Product	Quantity (%) (+/- 2%)
1.	Native maize Starch	62
2.	Germ Dry	8
3.	Gluten Dry	6
4.	Husk (Fiber) Dry	13
5.	Water (including volatile solids)	10
6.	Sand, Mud etc.,	1
Total		**100**

5. WASTE GENERATION AND MANAGEMENT FOR THE PRESENT PRODUCTION PROCESS

5.1 Liquid Effluent Generation and Management

The details of daily liquid effluent generation for the present production process are presented in Table 8.

Table 8: Details of daily liquid effluent generation for the present production process

Sl.No.	Type of effluent	Quantity (kL/d)
1	Sewage	20
2	Industrial effluent through use of raw water	500
3	Recycled treated waste water for tuber washing	340
4	Tuber Fruit water arises	80
5	Waste water from modified starch process	60
Total		**1,000**

The process of extracting starch from tapioca tubers requires about 500 kL/d of raw water and significant volumes of wastewaters are generated. The effluent from the starch industry is acidic and highly organic in nature. The wastewaters arising out of the washing of the

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tapioca tubers and the supernatant from the separator constitute the trade effluent from the starch industry. Liquid effluent generated during washing of tapioca tubers is found to be 340 kL/d. This wash water is directly fed into collection cum equalisation tank. In addition to the wash water, the tapioca process effluent (580 kL/d), modified starch effluent (60 kL/d) and the sewage generated (20 kL/d) within the industrial premises are also stored in collection-cum-equalisation tank. From the equalisation tank, the mixed effluent stream is distributed into 4 hybrid bio-methanation reactors each with holding capacity of 2,670 m^3 (16.5 m dia x 12.5 m height) Each reactor is packed with cross flow PVC fills of specific surfaces 102 m^2/m^3.

The partially treated effluent from the bio-methanation reactor is being passed directly into anaerobic lagoon. The residual organic matter present in the effluent of anaerobic lagoon is further treated by conventional aeration process (8 units provided with sub-surface fixed aerator of 10 hp motor). The effluent from the aeration tank is fed into primary settling tank, then treated effluent around 340 kL/d taken for tuber washing and the remaining 660 kL/d is passed through clarifier (secondary settling) to remove residual solids. The supernatant from the clarifier is used for irrigation. The characteristics of effluent before the treatment are given in Table 9. The process flow diagram for the existing ETP is shown in Fig. 10.

Table 9: Characteristics of effluent before treatment

S.No.	Parameters	Unit	Value*
1	pH	---	4.55
2	Electrical conductivity	µS/cm	8,090
3	COD	mg/L	26,000
4	BOD at 27°C for 3 days	mg/L	16,500
5	Suspended Solids	mg/L	10,000
6	Total Solids	mg/L	25,000
7	Total Dissolved Solids	mg/L	15,000

* Based on the analysis of samples done by the CES

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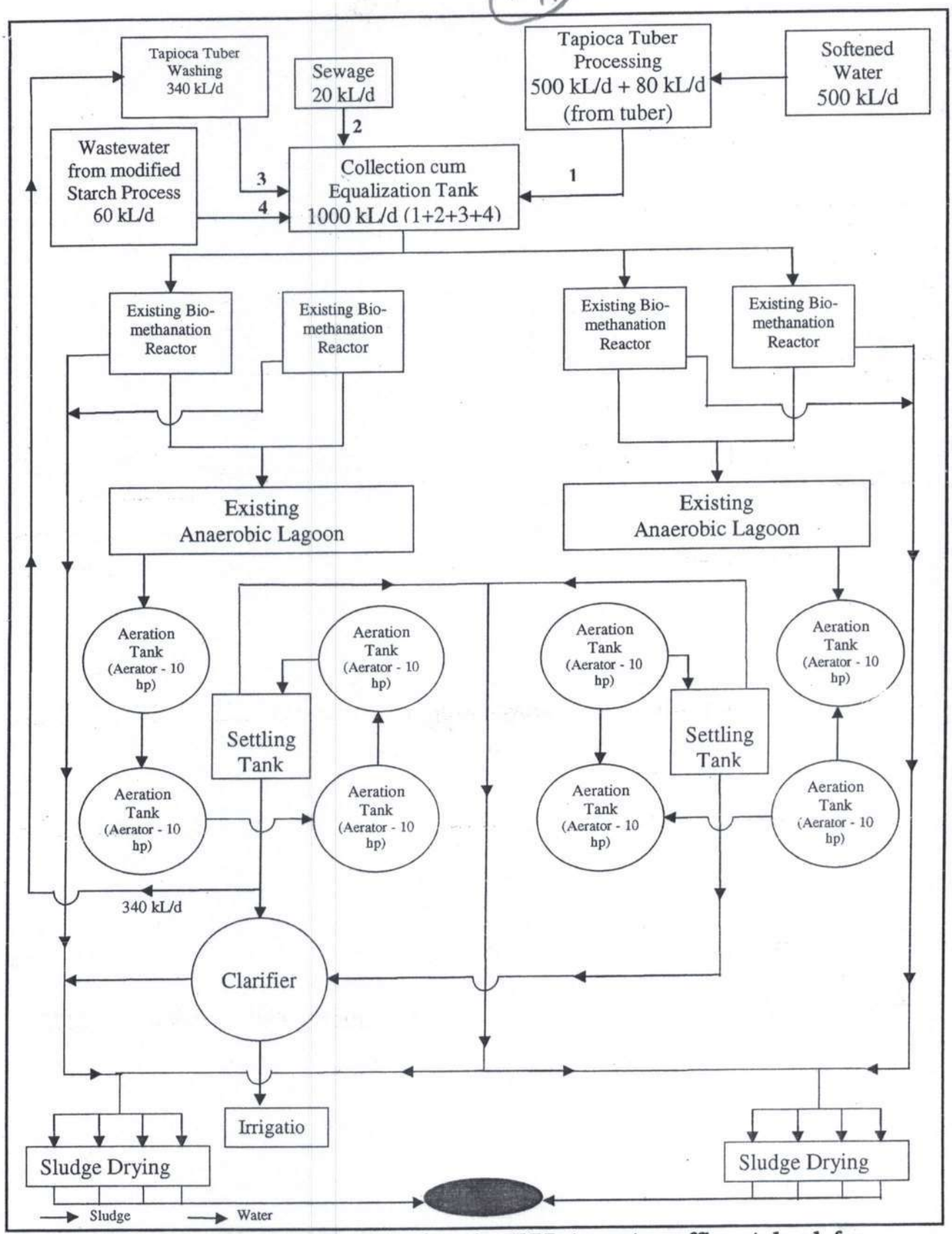

Fig 10. The process flow diagram for the ETP to cater effluent load for existing production process

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5.2 Solid waste generation and management:

The major source of solid waste generation in this starch industry includes:

- Peelings of outer skin of tapioca tubers
- Tapioca fibrous residue (Thippi- by product)
- partly stabilized sludge from sludge drying bed

The solid waste generated for the present production process is given in the Table 10.

Table 10: Solid waste generated for the present production process

S.No	Process	Quantity MT/d	Constituents
Tapioca starch			
1	Pre- cleaning	14.4	Outer most skin, soil particles
2.	Tapioca tippi	57.6	cellulose
3.	Biological sludge	4	----

The quantity of solid waste arising from pre-cleaning process is roughly around 14.4 MT/d. It consists of the outer skin mud and sand is being given to the farmers for using as manure. Thippi from screw press is dried in the open drying yard, in case of rainfall dumped in heaps in the open pit during the crushing season and is dried on summer season. The sun dried thippi is sold as animal feed. The total quantity of partly stabilized sludge from sludge drying bed is reported to be 4 MT/d which is being supplied to farmer as manure.

6. WASTE GENERATION AND MANAGEMENT FOR THE FUTURE PRODUCTION PROCESS

6.1 Liquid Effluent Generation and Management for the future Production Process (600 MT/d of Tapioca)

The summary of daily liquid effluent generation for the future production of tapioca starch for the crushing capacity of tapioca root at the rate of 600 MT/d is presented in Table 11.

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Table 11: Details of daily liquid effluent generation after expansion

Sl. No.	Type of effluent	Quantity kL/d
1	Sewage	20
2	Industrial effluent through use of raw water	600
3	Recycled treated waste water for tuber washing	620
4	Tuber Fruit water arises	100
5	Waste water from modified starch process	60
Total		**1,400**

The total liquid effluent generated for the crushing capacity of tapioca at the rate of 600 MT/d will be around 1400 kL/d during peak season (Nov-Feb). The tapioca root crushing period of the plant is November, December, January and February (4 months), which is considered as peak season; October & March (2 months), which is considered as lean season every year.

The existing ETP comprising of 4 Nos. of hybrid bio-methanation reactors, 2 Nos. of anaerobic lagoons, 8 Nos. of aeration tanks having sub-surface fixed type aerators of 10 hp capacity, 2 Nos. of primary settling tanks, 2 Nos. of sludge drying bed and 1 No. of clarifier (secondary settling). In order to handle an additional effluent load of 400 kL/d, the industry has proposed to install two more hybrid bio-methanation reactor of equal capacity to the existing 4 Nos. of hybrid bio-methanation reactors. The details of reactors proposed to be added to cater an additional effluent load of 400 kL/d is presented in Table 12. The process flow diagram for the ETP with proposed modifications to handle an additional effluent load for future production process is shown in Fig.11.

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It is proposed to collect four streams of wastewater (process wastewater, sewage, tuber wash and modified starch process wastewater) in equalisation tank. In addition to that, the effluent from the bio-methanation reactors would be recirculated (1 : 0.7) to equalisation tank to dilute incoming raw process wastewater. By this arrangement the organic load to the subsequent reactors will considerably be reduced.

The effluent from the equalisation tank would be distributed to six hybrid bio-methanation reactors of equal capacity. The treated effluent from the bio-methanation reactor would then be subjected to anaerobic treatment in 2 anaerobic lagoons followed by aerobic treatment in 8 aeration tanks. The solids present in the effluents from the aeration tanks is to be segregated with the aid of 2 primary settling tanks and a clarifier (secondary settling tank). It is proposed to install 2 decanters, each of 1 MT capacity to dewater the sludge.

Table 12 Reactor requirement for additional effluent load after expansion

Sl. No	Description of reactor	Number of units existing	Additional units proposed to be added	TOTAL
1	Collection-cum-equalisation tank	1	--	1
2	Hybrid Bio-methanation reactor	4	2	6
3	Anaerobic lagoon	2	--	2
4	Aeration tank (Aerator capacity 10 hp)	8	--	8
5	Settling tank	2	--	2
6	Clarifier	1	--	1
7	Sludge drying bed	2	--	2
8	Decanter	-	2	2

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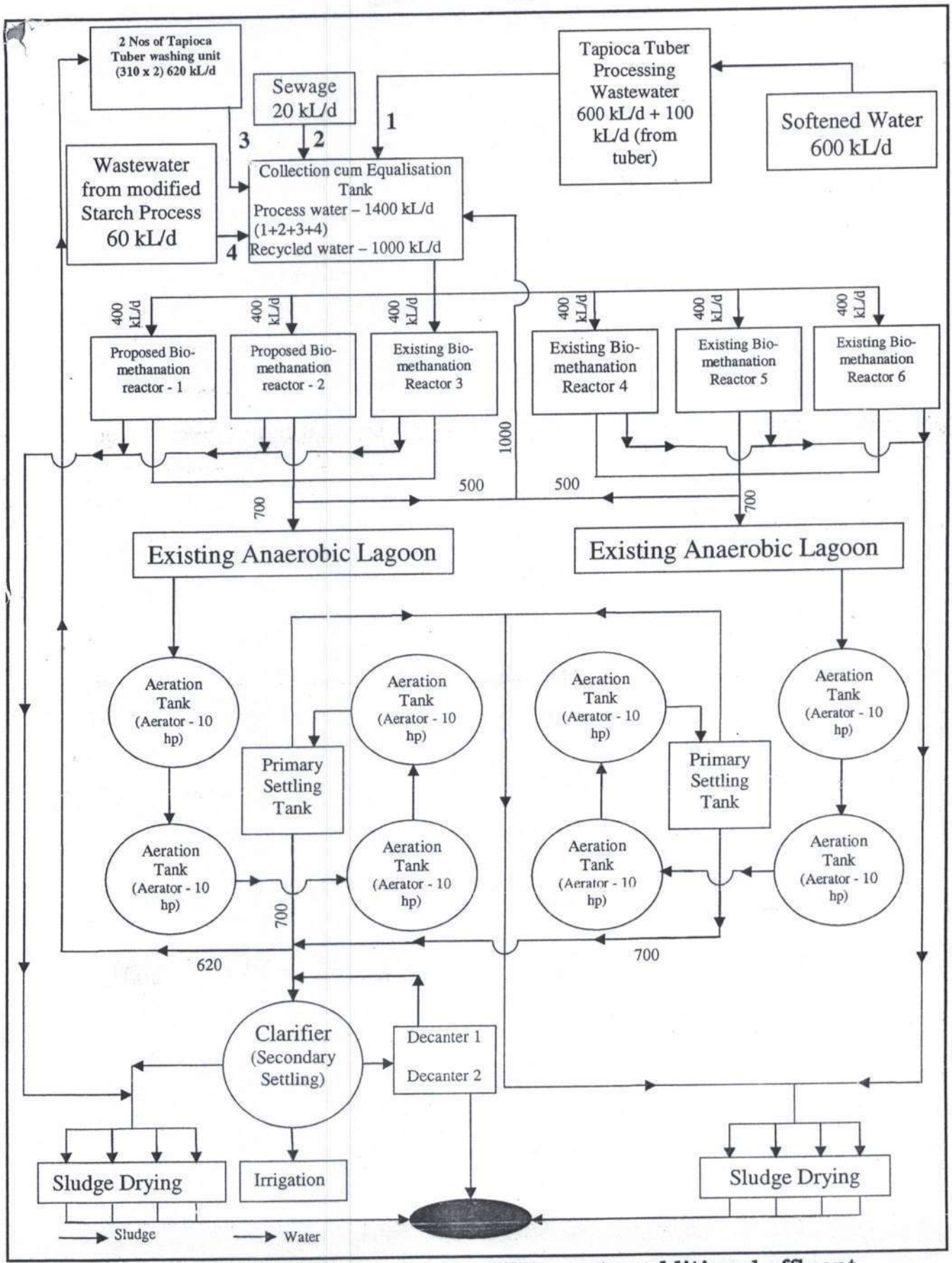

Fig 11. The process flow diagram for the ETP to cater additional effluent load of future production process

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6.1.1 BOD, COD and TSS in the Treated effluent

Based on the performance of existing ETP, the efficiency of various treatment units have been arrived as follows (Table 13):

Table 13: Treatment efficiency for existing bioreactors

Parameter	Removal Efficiency (%)			
	Hybrid bio-methanation reactor	Anaerobic lagoon	Aeration cum settling tank	Clarifier
BOD	94	85	85	20
COD	70	70	60	20
TSS	80	60	80	60

The characterization of raw wastewater such as BOD, COD and TSS are found to range from 15000 to 22000 (with a typical 18000 mg/L), 5000 to 10000 (typical 8000 mg/L) and 20000 to 34000 mg/L respectively. For the above range of values the residual BOD, COD and TSS that will be present in the treated effluent in the proposed ETP after expansion have been calculated. It is inferred from this calculation that the treated effluent meets the effluent quality standards prescribed by TNPCB in terms of BOD, COD and TSS.

6.1.2 Total Dissolved Solids in the Treated Effluent

According to industry, oxidised starch production involves maximum usage of chemicals when compared to other forms of modified starch. Therefore this product has been chosen for estimating expected TDS in the raw effluent. The maximum production capacity of modified starch plant is 69 MT/d.

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Average chemical consumption for producing 69 MT/d of oxidised starch

	Sodium Hypo Chlorite(kg)	Caustic Sod Lye (kg)	Hydro Chloric Acid(kg)	TOTAL (kg)
Average Consumption per ton of Modified Starch per day	280	5	18	303
Inorganic Solid contents per MT of Modified Starch	28	1.5	0.15	29.65
Inorganic Solid contents for 69 MT of Modified Starches by using above chemicals				2045
Less: Ash content in Modified Starch is around 1.7% normally ash generated through raw water around 0.3% after deducting 0.3% taken 1.4% which is arising from chemicals which is goes along with finished product.				966
Excess Inorganic Solid contents goes with Effluent Water				**1,079 kg**
TDS of composite wastewater if 1079 kg of inorganic salts in 60 kL/d of modified starch effluent mixed with 700 kL/d of tapioca process wastewater.				**1,498mg/L**
TDS of composite wastewater if 1079 kg of inorganic salts in 60 kL/d of modified starch effluent mixed with 580 kL/d of process wastewater of maize starch plant.				**1,860mg/L**

1079 kg in 60 kL = 17980 mg

The TDS level in effluent during the peak and off season of tapioca is expected to be 1,498 mg/L and 1,860 mg/L respectively. As per the calculations above, it is found that the TDS in the effluent will be below the standard limit of 2,100 mg/L.

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6.2 Liquid Effluent Generation and Management for the proposed Maize starch plant

It is proposed to set up a maize starch plant in the existing tapioca starch plant premises to manufacture maize starch by crushing around 375 MT of raw maize per day during the lean and off-season period of tapioca of around 150 days in a year by utilizing the existing facilities man power, connected electric power, Administration, other marketing set up, Effluent Treatment Plant and treated water utilization facilities for irrigation. During the tapioca off season the effluent generated due to maize processing will be around 580 kL/d. The quantity of liquid effluent for maize starch plant is lesser than tapioca starch plant. The tentative composite characteristics of maize starch process effluent are presented in Table 14. The characteristics of maize starch effluent are more or less similar to tapioca starch process effluent. The existing ETP with proposed modification is adequate to handle maize starch effluent at the rate of 580 kL/d during off peak season of tapioca.

Table 14: Characteristics of maize starch process effluent*

S.No	Parameter	Units	Value expected
1	pH	Number	4.2 – 5.0
2	Total Suspended Solids	mg/L	5,000 – 10,000
3	Total Dissolved Solids	mg/L	20,000 – 30,000
4	Chloride	mg/L	500 – 700
5	Sulphate	mg/L	250 – 350
6	Oil & Grease	mg/L	8 – 10
7	BOD 3 days at 27°C	mg/L	15,000 – 20,000
8	COD	mg/L	25,000 – 30,000

* Source: data furnished by industry

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6.3 Solid waste generation and management for the future production process

The solid waste generated for the future production process is given in the Table 14.

Table 15: Solid waste generation for the after expansion

S.No	Process	Quantity MT/d	Constituents
Tapioca starch			
1	Pre cleaning	18.0	Outer most skin, soil particles
2.	Tapioca tippi	60.0	---
3..	Biological sludge	5.0	---
Maize starch			
1.	Precleaning	3.75	Chaff, soil particle
2.	Husk and gluten	71.25	--
3.	Biological sludge	3.0	--

The anticipated quantities of solid waste arising from pre-cleaning process of tapioca and maize starch are 18 and 3.75 MT/d. respectively. It consists of the outer skin, chaff, mud and sand is being sold to the farmers as manure. Thippi from screw press is dried in the drying yard and during rainy days dumped in heaps in the open pits during the crushing season. The sun dried thippi, Gluten and husk are being sold as animal feed (important ingredient for making of animal feeds and poultry feeds). The total quantity of dewatered sludge from sludge drying bed will be 5.0 MT/d which is being used as manure.

At present, during the off season of tapioca, the industry collects and dewaters the biological sludge from the clarifier, bio-methanation reactors, anaerobic lagoons and excess sludge in the settling tank using sludge drying bed and in the drying yard. The dried sludge is being given to farmers (who are supplying tapioca

District Environmental Engineer (a/c)
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tuber) as manure. After the maize plant is commissioned, the operations of the plant will be carried out throughout the year and therefore the industry has planned to install two decanters each of 1 MT capacity per hour (on dry basis) to concentrate the sludge.

7. RECOMMENDATION

The present study shows that due to increase in crushing capacity of tapioca, a further load of 400 kL/d of liquid effluent is likely to be generated in addition to the existing load of 1000 kL/d of effluent. The treatment of this additional quantum of about 400 kL/d is proposed to be accommodated in the existing ETP with two additional hybrid bio-methanisation reactors along with recirculation of effluent and regulating the return sludge flow to aeration tank. Thus the capacity of the proposed ETP will be sufficient to treat the future load of 1400 kL/d.

The existing sludge dewatering units along with the two proposed decanters, each having a capacity of 1.0 MT/h are adequate to handle the future sludge generation of 5 MT/d.

In line with the scope of the present study, it is found that the existing ETP with proposed modifications will be adequate to meet the required treated effluent quality standards.

District Environmental Engineer
Tamil Nadu Pollution Control Board
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TAMIL NADU POLLUTION CONTROL BOARD

Proceeding No.: TNPCB / T2 / F.026102 / DMP / OL / Directions / W / 2021, dated: 18.04.2022

Sub.: TNPCB – Industries – M/s Varalakshmi Starch Industries Pvt. Ltd., S.F. No.75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti & 121 pt, 125 pt, 128-132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District – Directions under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 as amended – Issued for compliance – Regarding

Ref.: DEE's letter No. DEE / TNPCB / DMP / STARCH / OL / 2021, dated: 03.02.2022

******

Whereas, the unit of M/s Varalakshmi Starch Industries Pvt. Ltd., S.F.No.75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti & 121 pt, 125 pt, 128-132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District has applied for renewal consent order but the same was returned from the O/o. DEE, TNPCB, Dharmapuri so as to comply with all the additional conditions mentioned in the Proceeding dated 02.03.2020 and furnish the Status of compliance of conditions along with Report of Analysis of the sample collected on 13.11.2021 and resubmit the application through online.

Whereas, RTI petitions were received requesting details of the unit and also oral complaint was received against the unit regarding discharge of industrial effluent for Karuvelam tree development.

Whereas, based on the instructions received from the District Collector, Dharmapuri, the unit was inspected by DEE, TNPCB, Dharmapuri on 15.12.2021. During inspection, the following observations were made and report on the same was submitted to the District Collector, Dharmapuri on 15.12.2021.

1. The unit was found involved in production of Tapioca Starch and Sago production.
2. The treated effluent is being disposed for developing Seemai Karuvelam trees in an area of 15.41 Hectares. Stagnation of effluent water along with rain water was observed within the unit's premises.
3. Pipe line leakages were observed in the production area.
4. The house keeping was not satisfactory
5. The unit has started construction of two additional Anaerobic Bio Digesters and has not completed. In the pit of the proposed anaerobic digesters stagnation of the effluent along with rain water was observed.

No. 76, MOUNT SALAI GUINDY, CHENNAI - 600 032
Tel 044- [illegible] Fax: 044 2235 0314

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6. Stagnation of the treated trade effluent along with rain water was observed in the Seemai Karuvelam area.
7. Samples were collected in the following locations
   a) Peniyaruriver samples (at the front side and back side of the unit)
   b) Rain water harvesting pond
   c) Well water samples were collected from Nagaraj house located at a distance of 20 m and Mani house located at a distance of 350 m from karuvelam tree boundary of the unit.
   d) Inlet and outlet of the Effluent Treatment Plant and at the outlet of anaerobic digester.

Whereas, the unit was again inspected by DEE, TNPCB, Dharmapuri on 28.01.2022. During inspection, it was observed that the unit has not taken any steps to comply with the instructions issued vide DEE's letter dated 16.12.2021. Routine samples were collected from the ETP and sent for analysis. Also, it is submitted that the unit has resubmitted the application seeking renewal of consent of the Board on 29.01.2022 and the application filed by the unit was returned on 03.02.2022 for reasons stated above and the unit is operating without valid consent of the Board.

Whereas, the Report of Analysis of the ETP outlet samples (three samples) collected during the month of November 2021 and December 2021 reveals that the parameters TSS, TDS, BOD and COD exceeds the standards prescribed by the Board. Also, the report of analysis of ground water samples (Five samples) collected around the unit reveals that the parameters Turbidity, TDS, Cl, Mg, F, Total Ammoniacal Nitrogen, Ca and Alkalinity exceeds the Drinking Water – Specification (IS 10500:2012). The Peniyaru river flows at a distance of 150 m from treated effluent discharge point The ROA of the river water samples (two samples) collected reveals that the parameters Turbidity, TDS, Cl, Mg, Total Ammonical Nitrogen and Alkalinity exceeds the Drinking Water – Specification (IS 10500:2012).

In view of the above, DEE, TNPCB, Dharmapuri vide reference cited above, has recommended to consider the issue of directions under Water Act to the unit

In the light of the above said facts it is decided to issue the following direction to the unit of M/s. Varalakshmi Starch Industries Pvt. Ltd., S.F.No.75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti & 121 pt, 125 pt, 128-132 pt, 138 pt of Alamelupuram Village Pappireddipatti Taluk, Dharmapuri District under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 as amended for strict compliance.

1. The unit shall take immediate steps to arrest the pipe line leakages in the process area.

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2 The unit shall immediately take steps to improve the performance of the Effluent Treatment Plant, also operate and maintain the Effluent Treatment Plant efficiently and continuously so as to satisfy the standards prescribed by the Board, since the Report of Analysis of the ETP outlet samples (Three samples) collected during the month of November 2021 and December 2021 reveals that the parameters TSS (1/3), TDS (1/3), BOD (2/3) and COD (3/3) exceeds the standards prescribed by the Board.

3. Further, the unit shall immediately take steps to uniformly distribute the treated effluent without any stagnation, in the area meant for irrigation / green belt development area, since the report of analysis of ground water samples (Five samples) collected around the unit's premises reveals that the parameters Turbidity (5/5), TDS (5/5), Cl (4/5), Mg (5/5), F (2/5), Total Ammonical Nitrogen (5/5), Ca (4/5) and Alkalinity (5/5) exceeds the Drinking Water – Specification (IS 10500:2012), as stagnation of effluent causes seepage into ground water.

4. The opinion of Agriculture Department given below may be considered for implementation

   a) The unit shall plant Casuarina short rotation clones like TNAU Casuarina MTP 1 and TNAU Casuarina MTP 2 due to its fast growth, multiple utility, nitrogen fixing ability and amenability towards all types of agro and farm forestry systems. The Eucalyptus grandis and Melia dubia are all suitable for planting.

   b) Though Prosopis Juliflora is a drought tolerant hardy plant which extracts more water it is considered an invasive tree species. As the invaded area is large and labour intensive, planting the other above said tree species in phased manner can be carried out for efficient utilization of effluent water.

5. The unit shall take necessary steps to treat the stagnated effluent mixed with rain water in the proposed anaerobic pit immediately and shall ensure that there is no stagnation of effluent in the incomplete pits.

6. The unit shall improve the aesthetic conditions of the Effluent Treatment Plant and to dispose the sludge / scums into Sludge Drying Beds only, for further treatment.

7. The unit shall carry out water and waste water audit so as to reduce the water consumption / waste water generation by engaging reputed institutions within six months.

No 76, MCU... ...ALAI GUINDY CHENNAI - 600 032
Tel 044 - ...3134 - 139 Fax 044 2254 3058

District Environmental Engineer (o/c)
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8. The unit shall file application immediately seeking authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (for generating used oil from DG sets), along with valid consent of the Board.

Failure to comply with the above directions will lead to further action including issue of closure direction and disconnection of power supply to the unit.

The receipt of this proceeding shall be acknowledged.

For Chairman

20.04.2022

To:
The Managing Director,
M/s. Varalakshmi Starch Industries Pvt. Ltd.,
Alamelupuram Village and Pappireddipatti Village,
Pappireddipatti Taluk, Dharmapuri District,
Pin: 636 905.

Copy to:

1. The Joint Chief Environmental Engineer (M),
   Tamil Nadu Pollution Control Board,
   Vellore Zone
2. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Dharmapuri
3. File Copy

District Environmental Engineer
Tamil Nadu Pollution Control Board
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TAMIL NADU POLLUTION CONTROL BOARD

Proceeding No.: TNPCB / T2 / F.025102 / Directions / Water / 2022 , dt: 17.10.2022

Sub. TNPCB – Industries – M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F. No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt,128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District – Directions issued under Section 33A of the Water (P&CP) Act, 1974 as amended – Regarding.

Ref.

1. Proceeding No.: TNPCB / T2 / F.025102 / DMP / OL / Directions / W / 2021, Dated: 18.04.2022
2. DEE's Letter No.: DEE / TNPCB / DMP / STARCH / OL / 2021, Dated: 24.05.2022
3. Board's Memo No.: T2 / TNPCB / F.025102 / DMP / OL / 2021, Dated: 17.06.2022
4. JCEE (M)'s Letter. No.: JCEE (M) / TNPCB / VLR / F.No.1510 / DMP-OL / 2022, Dated: 12.09.2022.

****

Whereas, direction was issued to the unit M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F.No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt,128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District vide proceeding 1st cited to comply with certain conditions stipulated therein. Subsequently, the unit was inspected by the Officials of O/o. DEE, Dharmapuri on 23.05.2022 and observed that the unit has not complied with most of the conditions of the direction issued to the unit. In view of the above, DEE, Dharmapuri vide reference 2nd cited recommended to conduct a personal hearing with unit.

Whereas, the Board vide reference 3rd cited, requested the JCEE (M), Vellore to inspect the unit and give a personal hearing and send a detailed report. Based on the Board's instruction, the unit was inspected by the JCEE (M), Vellore along with the Officials of O/o. DEE, Dharmapuri on 04.08.2022 and observed that the unit has not complied with any of the conditions imposed in the direction issued to the unit.

Whereas, unit was requested by the JCEE(M) to attend the personal hearing in the O/o. JCEE(M), TNPCB, Vellore on 22.08.2022 with all relevant particulars. The Managing Director of the above unit attended the personal hearing on 22.08.2022 and during the personal hearing the DEE, Dharmapuri was also present. During the personal hearing, the unit was requested to furnish certain details including action plan with time schedule for revamping the existing ETP.

No. 76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Telephone : 22353134 to 141, Fax : 044-22353068

District Environmental Engineer
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Whereas, in response to the personal hearing conducted with the unit by JCEE (M), Vellore, the unit has sent a reply vide letter 25.08.2022. From the same the JCEE (M) observed that,

1) The unit has not complied the most of the directions issued by the Board vide board's proceedings dt: 18.04.2022. The unit has not improved the existing ETP so far and the existing ETP will not serve the purpose of satisfying the treated effluent standards as prescribed by the Board.
2) The unit has to conduct detailed study by a reputed institution by Anna University, Chennai / IIT Chennai on water and waste water audit and adequacy of their existing and proposed effluent treatment plant systems.
3) The unit has not satisfied the treated effluent standards prescribed by the Board, as collected from November 2021 to June 2022. The main parameters TSS, BOD & COD are mostly exceeding the standards prescribed by the Board.
4) The unit has not taken any efforts to replace the Seemai Karuvelam and to plant the native species as suggested by the Agricultural Department till date.

In the view of the above, JCEE (M), Vellore, vide letter 3rd cited has recommended to direct the unit to furnish certain details immediately.

In the light of the above, the unit of M/s. Varalakshmi Starch Industries, Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District is issued with the following directions under Section 33A of Water (Prevention and Control of Pollution) Act, 1974.

1. The unit has to furnish an action plan with time schedule for revamping the existing ETP provided so as to satisfy the treated effluent standards as prescribed by the Board and remove the Seemai Karuvelam trees already planted by them and replacing the same by planting the native species as recommended by the Agriculture Department along with proposal for safe disposal of entire quantity of treated effluent within 15 days.
2. The unit shall ensure that the treated effluent is uniformly dispersed for green belt development without any stagnation and also shall not discharge any treated /untreated trade effluent in to nearby water bodies
3. The unit has to furnish the report on Water and Wastewater audit and groundwater quality study carried out by reputed Institution like Anna University, Chennai / IIT Chennai within three months.
4. The unit has to cover the area of the storage of wet Tapioca Thippi by providing a shed within 3 months.

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5. The unit has to provide proper storm water drain to restrain the rain water mixing with trade effluent generated from the process area within three months.

6. The unit shall provide compound wall around the green belt area and ETP area within nine months.

7. In order to ensure for the compliance of the above directions 1 to 6, the unit shall furnish a Bank Guarantee for Rs. 50 Lakhs with validity for two years within a week's to the TNPCB, Chennai. (Format enclosed)

Failing to comply with the above direction, further action will be initiated against the unit on merits in accordance with law without any prior intimation.

The receipt of this proceeding shall be acknowledged.

Enclosure: As above

17/10/22

For Chairperson

17/10/2022

To

The Managing Director,
M/s. Varalakshmi Starch Industries Pvt. Ltd.,
Alamelupuram Village, Pappireddipatti Taluk,
Dharmapuri District
Pin: 636 905

Copy To

1. The Joint Chief Environmental Engineer (M),
   Tamil Nadu Pollution Control Board,
   Vellore Zone - JCEE (M) is requested to furnish quarterly report on the unit's operation.

2. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Dharmapuri.
   - The DEE, Dharmapuri is requested to monitor the above unit closely. After getting the reply for the above directions and Bank Guarantee from the unit, the DEE shall examine the issue of renewal of consent for current year. Based on the performance of the ETP operations and compliance of the directions, further renewal shall be decided by DEE. Further, the DEE is requested to furnish monthly report on the unit's operation.

District Environmental Engineer
Tamil Nadu Pollution Control Board
DHARMAPURI

(a/c)

No. 76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Telephone : 22353134 to 141, Fax : 044-22353068
Email : tnpcb-chn@gov.in Web : www.tnpcb.gov.in

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TAMILNADU POLLUTION CONTROL BOARD

Proceeding No.: TNPCB / T2 / F.025102 / DMP / Closure / Water / 2022, dt:08.11.2022

Sub.: TNPCB – Industries – M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F. No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt, 128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District – Directions for closure and disconnection of power supply under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended – Orders issued – Regarding

Ref.: 1. Proceeding No.: TNPCB / T2 / F.025102 / Directions / Water / 2022 , dt:17.10.2022
2. Compliant petition dated 22.10.2022
3. DEE's Letter No.: DEE/TNPCB/DMP/F.DMP0013/OL/2021, dt:03.11.2022 and 07.11.2022.

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Whereas, Direction was issued to the unit M/s. Varalakshmi Starch Industries Pvt. Ltd, vide proceeding 1st cited under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended to comply with certain conditions.

Whereas, the unit vide letter dated 19.10.2022 has requested certain details pertaining to the said Direction issued to the unit, for which Board vide letter dated 27.10.2022 instructed the unit to comply with the Direction issued within the prescribed time limit and to furnish the status report on compliance on weekly basis.

Whereas, a complaint petition was again received vide reference 2nd cited against the operation of M/s. Varalakshmi Starch Industries. In this regard, the unit was inspected by the officials of O/o. DEE, Dharmapuri on 03.11.2022 and during inspection the following observations were made.

1. The unit was not in operation and no production has been observed, however the unit has started receiving tapioca roots from the farmers for commissioning its crushing activity.
2. As the unit was not in operation during inspection, no trade effluent was generated
3. The unit was in the process of revamping the existing ETP. The unit has proposed to install MBR as additional component in the treatment plant and was carrying out civil works for mounting the same. The unit has installed Filter press and one of the ETP components and not yet commissioned.
4. The unit is yet to take steps for removal of seemaikaruvelam trees already planted by them and replacing the same by planting the native species as recommended by the Agriculture Department
5. The unit has not furnished any action plan with time schedule for carrying out Water and Waste water audit and ground water quantity study through reputed institution like Anna University, Chennai / IIT Chennai
6. The unit has not taken any steps to provide shed cover the area of the storage of wet Tapioca Thippi and has also not furnished any action plan for the same.
7. The unit has not taken any steps to provide proper storm water drain to restrain the rain water mixing with trade effluent and has also not furnished any action plan for the same.
8. The unit has not taken any steps to provide compound wall around the green belt area and the ETP area and has also not furnished any action plan for the same
9. The unit has not furnished Bank Guarantee for Rs 50 Lakhs with validity for two years for compliance of the Directions issued.

District Environmental Engineer
Tamil Nadu Pollution Control Board
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10. Report of Analysis of the samples collected at the outlet of the ETP on 13.11.2021, 09.12.2021, 15.12.2021, 28.01.2022, 25.02.2022, 16.03.2022, 05.04.2022, 09.05.2022, 22.06.2022 reveals that the parameters TSS, TDS, BOD and COD exceeds the standards prescribed by the Board.

Whereas, the DEE, TNPCB, Dharmapuri vide reference 3rd cited has recommended for direction for closure and disconnection of power supply to the unit under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended.

In the light of the above said facts it is decided to issue direction for closure and disconnection of power supply to the unit of M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F. No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt, 128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended for the above violations.

Therefore, in exercise of the powers conferred under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended, it is hereby directed that the unit of M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F. No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt, 128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District shall be closed and power supply shall be disconnected with immediate effect.

This order of closure and disconnection of power supply is issued by Chairperson as per the delegation of powers issued by the Board vide B.P.No.9, dated 11.03.1994.

The receipt of this proceeding shall be acknowledged.

Sd/-
Chairperson

To:
The Managing Director,
M/s. Varalakshmi Starch Industries Pvt. Ltd.,
Alamelupuram Village, Pappireddipatti Taluk,
Dharmapuri District - 636 905

Copy to:

1. The District Collector,
   Dharmapuri District
2. The Joint Chief Environmental Engineer (M),
   Tamilnadu Pollution Control Board,
   Auxilium College Road , (Opposite to Auxilium College) Gandhi Nagar,
   Vellore -632 006.
3. The District Environmental Engineer,
   Tamilnadu Pollution Control Board,
   SF.No.415/1,Adhiyaman kottai - Hosur Bypass road,
   A.Reddihalli village(Near to Don Bosco College),
   Dharmapuri Taluk, Dharmapuri District - 636 809.
4. The Superintending Engineer / Dharmapuri
   Salem Main Road, Opposite to Collectroate,
   Dharmapuri – 636 705
   E-mail : sedpi@tnebnet.org
5. The Assistant Engineer / Pappireddipatti/Town,
   Town Pappireddipatty 33KVSub station campus,
   Pappireddipatty – 636905
   E mail: vld129ae@tnebnet.org.
6. File Copy

Date 08/11/22

For Chairperson

District Environmental Engineer
Tamil Nadu Pollution Control Board

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TAMILNADU POLLUTION CONTROL BOARD

Proceeding No.: TNPCB / T2 / F.025102 / DMP / Closure / Water / EB / 2022, dated: 08.11.2022

Sub.: TNPCB – Industries – M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F. No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt, 128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District – Direction for disconnection of power supply to the unit under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended – Orders issued – Regarding.

Ref.: 1. Proceeding No.: TNPCB / T2 / F.025102 / DMP / Closure / Water / 2022, dated: 08.11.2022

2. Memo No.: SE / Comm. / EE 3 / Assistant Environmental Engineer – 1 / TNPC Board / D 320 / 2002, dated: 04.12.2002 from the Chairman, TNEB to Superintending Engineers of all electricity Distribution Circles, TNEB.

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Tamil Nadu Pollution Control Board enforces the provisions of Water (Prevention and Control of Pollution) Act, 1974 as amended. As per Section 33A of Water (Prevention and Control of Pollution) Act, 1974, the Board is empowered to issue Directions for closure, prohibition or regulation of any industry and stoppage of electricity or any other services. Instructions have been issued by Tamil Nadu Electricity Board in this regard vide reference 2nd cited.

In this connection, a copy of Board's Proceeding 1st cited is also enclosed wherein directions have been issued under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended for closure and disconnection of power supply to the unit of M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F. No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt, 128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District in view of the reasons stated therein.

It is hereby further directed in exercise of the powers conferred under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended, the power supply to the above said unit shall be disconnected with immediate effect.

The receipt of the proceeding shall be acknowledged and the action taken in this regard shall also be intimated to this office at the earliest.

Enclosure: As above.

Sd/-
Chairperson

To

1. The Superintending Engineer / Dharmapuri
Salem Main Road, Opposite to Collectroate,
Dharmapuri – 636 705

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(161)

TAMILNADU POLLUTION CONTROL BOARD

2. The Assistant Engineer / Pappireddipatti/Town,
Town Pappireddipatty 33KVSub station campus,
Pappireddipatty – 636905
E mail: vld129ae@tnebnet.org.

Copy to:

1. The District Collector,
Dharmapuri District
2. The Joint Chief Environmental Engineer (M),
Tamilnadu Pollution Control Board,
Auxilium College Road , (Opposite to Auxilium College) Gandhi Nagar,
Vellore -632 006.
3. The District Environmental Engineer,
Tamilnadu Pollution Control Board,
SF.No.415/1,Adhiyaman kottai - Hosur Bypass road,
A.Reddihalli village(Near to Don Bosco College),
Dharmapuri Taluk, Dharmapuri District - 636 809..
4. The Managing Director,
M/s. Varalakshmi Starch Industries Pvt. Ltd.,
Alamelupuram Village, Pappireddipatti Taluk,
Dharmapuri District
Pin: 636 905
5. File Copy

05/11/22
For Chairperson

8/11/22

District Environmental Engineer (a/c)
Tamil Nadu Pollution Control Board
DHARMAPURI

(162)

GOVERNMENT OF TAMIL NADU

Abstract

ENVIRONMENT CONTROL – Control of Pollution of Water Sources – Location of industries within 1 K.M. from the embankments of rivers, streams, dams etc. – Imposition of restrictions – Orders – Issued.

ENVIRONMENT AND FORESTS (EC-I) DEPARTMENT

G.O. Ms. No: 213 Dated the 30th March, 1989.
Read:
(1) G.O. Ms. No:1 Environment Control Dated: 6.2.84
(2) From the Member Secretary, Tamilnadu Pollution Control Board Lr. No:BMS(1)/18878/88 Dated: 23.8.88.
(3) From the Chairman, Tamilnadu Pollution control Board Lr. BMS(1) / 44365/88 Dated: 3.1.88 and letter of even no. Dated: 30.12.88.
ORDER:-

In the Government Order first read above, the Government have ordered, among other things, that no industry causing serious water pollution should be permitted within one kilometer from the embankments of rivers, streams, dams etc. and that the Tamilnadu Pollution Control Board should furnish a list of such industries to all local bodies. It has been suggested that it is necessary to have a sharper definition for water sources so that ephemeral water collections like rain water ponds, drains, sewerages (bio-degradable) etc. may be excluded from the purview of the above order. The Chairman, Tamilnadu Pollution Control Board has stated that the scope of the Government Order may be restricted to reservoirs, rivers and public drinking water sources. He has also stated that there should be a complete ban on location of highly polluting industries within 1 kilometre of certain water sources.

2. The Government have carefully examined the above suggestions. The Government improve a total ban on the setting up of the highly polluting industries mentioned in Annexure – I to this order within one kilometer from the embankments of the water sources mentioned in Annexure II to this order.

3. The Government also direct that under any circumstance if any highly polluting industry is proposed to be set up within one kilometer from the embankments of water sources other than those mentioned in Annexure-II to this order, the Tamilnadu Pollution Control Board should examine the case and obtain the approval of the Government for it.

4. The receipt of this order may be acknowledged.

(BY ORDER OF THE GOVERNOR)

D. SUNDARESAN,
COMMISSIONER AND SECRETARY
TO GOVERNMENT

To
The Chairman,
Tamilnadu Pollution Control Board
32, Santhome High road,
Madras – 600 004.

All Heads of Departments
All Departments of Secretariat, Madras – 9.

ANNEXURE – I

LIST OF HIGHLY POLLUTING INDUSTRIES

1. Distilleries
2. Tanneries, Sago, Sugar, Dairies and Glue
3. Fertilizer
4. Pulp & Paper (with digestor)
5. Chemical units generating trade effluent containing such pollutants which may to pollute air, water and land before treatment and those chemicals which may alter the environmental quality by under going physical, chemical and biological transformation.
6. Petroleum Refinery
7. Textile Dyeing Units
8. Steel Plant (Electroplating, heat treatment etc.)
9. Ceramics

10. Thermal Power Station
11. Basic Drug Manufacturing Units
12. Pesticide
13. Asbestos
14. Foundries

ANNEXURE II OF G.O. Ms.No:213 E&F (EC-I) Dept. Dated:30.3.89

LIST OF RIVERS, STREAMS, RESERVOIRS, ETC.

S.No 1.	Rivers 2.	Tanks and Reservoirs 3.	Canals 4.	
MADRAS & CHENGALPATTU DISTRICTS				
1.	Araniyaru	Chembarambakkam Tank Thenneri Hissa Tank Uthiramerur Tank Maduranthagam Tank Parayankalathur Tank Cooum Tank Manimangalam Tank Poondi Reservoir Cholavaram Lake Red Hills Lake	Upper supply Channel (Poondi to Cholavaram) Lower supply Channel (Cholavaram to Redhills) Cheyyar Anicut Main Channel	
2.	Koaratalaiyar			
3.	Cooum			
4.	Adayar			
5.	Palar			
6.	Nagari			
7.	Nandiyaru			
8.	Cheyyar			
9.	Kiliyaru			
10.	Ongur			
SOUTH ARCOT DISTRICT				
1.	Varahanadhi	Wellington Reservoir Vidur Reservoir Gomuki Reservoir Manimukthanadhi Reservoir Veeranam Tank Perumal Tank	Sathanur Reservoir Project Canal Sathanur Reservoir Project Right Bank Canal	
2.	Malattaru			
3.	Pennaiaru		Pambai Channel Malattar Channel Raghavian Channel Sithalingamadam Channel Vadamarudur Channel	Thirukkoilur anaicut
4.	Gadilam			
5.	Vellar			
6.	Coleroon			
7.	Tundiaru			
8.	Pambaiyar			
9.	Gomuki		Maragadapuram Channel Alargal Channel Kandapakkam Channel	Ellis Choatry Anaicut
10.	Manimukthanadhi			
11.	Musukunda Nadhi			

			Eralur Channel	
12.	Thurinjalar		Wellington Reservoir Supply Channel (From Toludur Regulator)	
13.	Vasistanadhi		Wellington Reservoir Main Canal	
14.	Vadavar		Wellingdon Reservoir Low Level Canal. Pelandorai Anicut Main Channel	
			North Rajan Channel South Rajan Channel Kunukkumanniyar Channel	Lower Coleroon Anaicut.
			Vellar Rajan Channel Veeranam and New Supply Channel	Sethiathope Anaicut
			Gomuki Reservoir Main Canal	
			Manimukthanadhi Reservoir Main Canal	
			Vridhachalam Anaicut Main channels (North & South)	
			Mehamathur Anaicut Channel	
THANJAVUR DISTRICT				
1.	Cauvery		Grand Anaicut Canal Lower Coleroon Anaicut Canals	
2.	Coleroon			
3.	Kodamurutty			
4.	Arasalar			
5.	Veerasholan			
6.	Vikramanar			
7.	Vennar			
8.	Vettar			
9.	Vadavar			
10.	Koraiyar			
11.	Paminiar			
12.	Pandavayar			
13.	Vellayar			
14.	Mulliyar			
15.	Ayyanar			

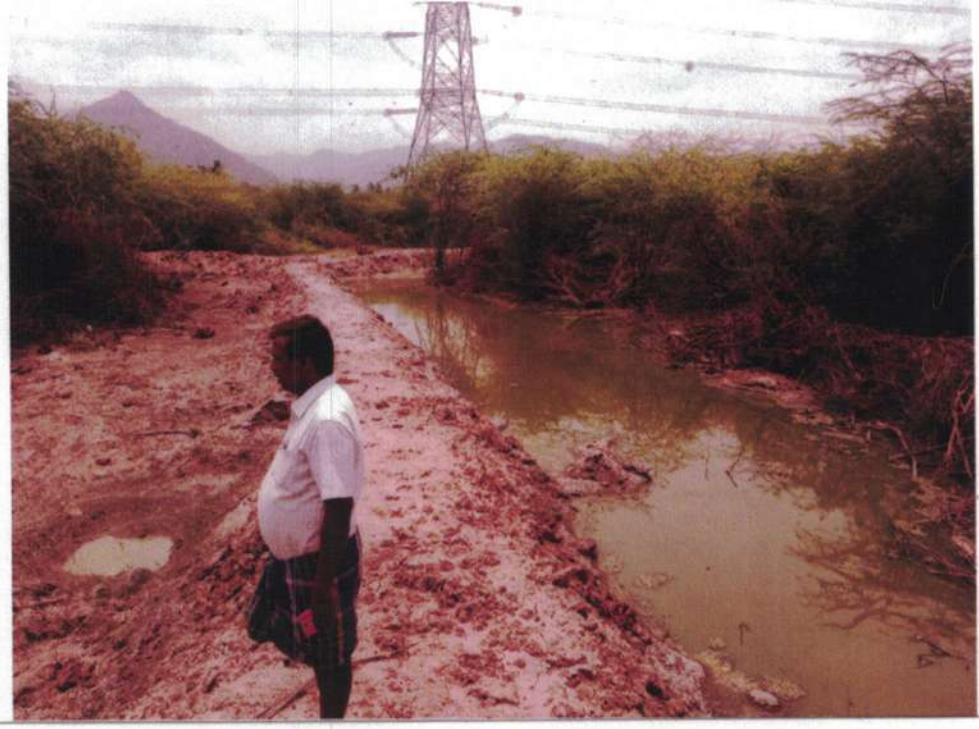
TRICHY DISTRICT				
1.	Cauvery	Ponnaiyar Reservoirs	North bank Canal South Bank Canal	Kattalai Bed Regulator
			Kattalai Right-Left Canal	
2.	Amaravathi		Uyyakondan Channel	
3.	Coleroon		Nanganur channel	
			Pullambadi Channel	
			Ponnaniyar Reservoir new Canal	
PUDUKKOTTAI DISTRICT.				
1.	Vellar	-	Grand Anicut Canal	
2.	Ambuliyaru			
3.	Agniceru			
4.	Koraiar			
MADURAI DISTRICT				
1.	Vaigai	Vaigai Reservoir	Gungun Valley Anaicut Canals	
2.	Suriliyar	Sathiar Odai Reservoir	Periyar Main Canal	
3.	Kottakudiar		Manjalar Canal	
			Thirumangalam Main Canal	
			Sathiar Odai Reservoir Canals	
ANNA DISTRICT				
1.	Shanmughanathi	Palar Porandalar	Palar-Porandalar Main Canal	
			Thadakulam Tank canals	
2.	Koduvanaru	Parappalar	Ramasandram Anicut Channel (Posappalam)	
			Vardamahadhi Reservoirs System	
3.	Manjalaru	Vardamanadhi	Vardamahadhi Reservoirs System	
4.	Mamdanadhi	Manjalar	Thirumangalam Main Channel	
5.	Palar-Porandalar	Kodaikanal Lake	Periyar Main Canals	
6.	Parajipalar	Berijam Lake	Murudanadhi Reservoir Left & Right Side	
7.	Vaigai River	Kamaraj Sagar	Mayalaru Reservoir Canals	
RAMANATHAPURAM DISTRICT				
1.	Vaigai	R.S. Mangalam Tank	--	
2.	Vaipparu	Ramanad Big Tank	--	
3.	Vembaru	Kanoor Tank	--	
4.		Maranadu Tank	--	
PASUMPON MUTHURAMALINGAM DISTRICT				
1.	Vaigai	--	Periyar Main Canals	
2.	Manimuthar			
KAMARAJAR DISTRICT				
1.	Vaipparu	Kullur Sandai	--	

		Reservoir	
2.	--	Vembokottai Reservoir	
THIRUNELVELI KATTABOMMAN DISTRICT			
1.	Thamaraparani	Manimuthar	North Kodamelagian Channel
2.	Karuppanadhi	Karuppanadhi	Nadiyunni Channel
3.	Chettiar	Ramanadhi	Kannadian Channel
4.	Servalar	Gatana	Kodayan Chennel
5.	Manimuthar	Papanasam	Palayam Channel
		Kadamba Tank	Tirunelveli Channel / Tenkal Channel / Vadakkal Channel — Ramanathi Reservoir
		Vijayanarayar	
		Periyakulam	
		Tenkanai Tank	Manimuthar Reservoir main Channel-Gatana Reservoir
			Arasapattu Channel
			Vadakuruvaipathu Channel Gatana Reservoirs
			Radhapuram Channel
VOC CHIDAMBARANAR DISTRICT			
1.	Tambaraparani	Korampallam Tank	Marudur Melakkal Channel
2.	Vaippar		South Main Channel of Srivaikundam Anicut
			North Main Channel of Srivaikundam Anicut
KANYAKUMARI DISTRICT			
1.	Kodaiyaru	Pechiparai	Padmanabhapuram Puthen Channel
2.	Valliar	Perunchani	Pandiankal
3.	Palayaru	Chittarl	Thovala Channel
			N.P. Channel
			Pazhayaru
			E.K. Kal System
			A.V.M. Channel
			Thiruvithancode Canal System
			Pechiparai Left Bank Canal
			Pattanamkal System
			Radhapuram Canal
COIMBATORE DISTRICT			
1.	Bhavani	Parambikulam	Ramakulan Channel
2.	Noyyal	Sholayar	Kallapuram Channel
3.	Amaravathi	Amaravathi	Parambikulam Right Left Canal
			Parambikulam Main Canal
			Bhalli Channel system
4.	Aliyar	Aliyar	Vettaikaranpudur Canal

		Poruvanpallar	Sethumadai Canal
		Thunnokhadam	Udumalpet Canal
		Upper Nivan	Aliyar Feeder Canal
		Lower Nivan	Pollachi canal
		Thirumathi	
NILGIRIS DISTRICT			
1.	Moyar	Upper Bhavani	Avara Halla Canal
2.	Bhavani	Emerald	
3.	Pillur Pallam	Avalanche	
4.	Kulkathurai Halla	Pillur	
5.	Dedarahalla	Kundah	
6.	Avarai Halla	Paikara	
7.	Paikara	Ooty Halla	
8.	Amkour halla	Parson Valley	
9.	Singar	Glemergon	
		Singara	
PERIYAR DISTRICT			
1.	Cauvery	Bhavani Sagar	Modineri Anicut Canals
2.	Bhavani	Uppar	Thadappalli Channel
			Lower Bhavani Channel
			Kalingarayan Anicut Canal
3.	Moyar	Uttamalaikarai Odai	Upper Reservoirs canal
4.	Noyyal	Varattapallam	Vattamalai Kaveri odai Reservoirs Canal
		Gunderipallam	Varattappallam Keshmir Canal
			Gunderipallam Reservoirs right side and left side canals
SALEM DISTRICT			
1.	Cauvery	Mettur Reservoir	Mettur Canals (East & West Bank canals)
2.	Thirumanimuthar	Yercadu Lake	
3.	Vashishtanadhi		
DHARMAPURI DISTRICT			
1.	Cauvery	Krishnagiri Reservoir	Krishnagiri Reservoir Main Canal
2.	Pennaiyaru	Chinnar Reservoir	Bargur Tank Supply Channel (West & East)
3.	Palar	Thunvalahalli Reservoir	Nedungal Anicut Channel
4.	Chinnar I	Bargur Big Tank	Devarahalli Tank Supply Channel
5.	Chinnar II	Mettur Reservoir	Chinnar Reservoir Right Side Channel
6.	Bargur river	Pambar	

7.	Pambar			
8.	Vaniar			
9.	Chinnaru			
10.	Palaru			
NORTH ARCOT DISTRICT				
1.	Palar	Sathanur Reservoir	Mahendravadi Channel Kaveri pak Channel Sukkiramallur Channel Dari (Temmampattu) Channel Kavai Channel Govindavadi Channel	Palar Anaicut
2.	Poiney	Dusi Mamandur Tank		
3.	Cheyyar	Kaveripakkam Tank		
4.	Pennaiyar			
5.	Thurinjilaru			
			Poiney Eastern Main Channel Poiney Western Main Channel	Poiney Anicut
			Sathanur Reservoir Project Canal Sathanur Reservoir Project Right Bank Canal	Sathanur Reservoir

D.SUNDARESAN,
COMMISSIONER AND
SECRETARY TO GOVERNMENT

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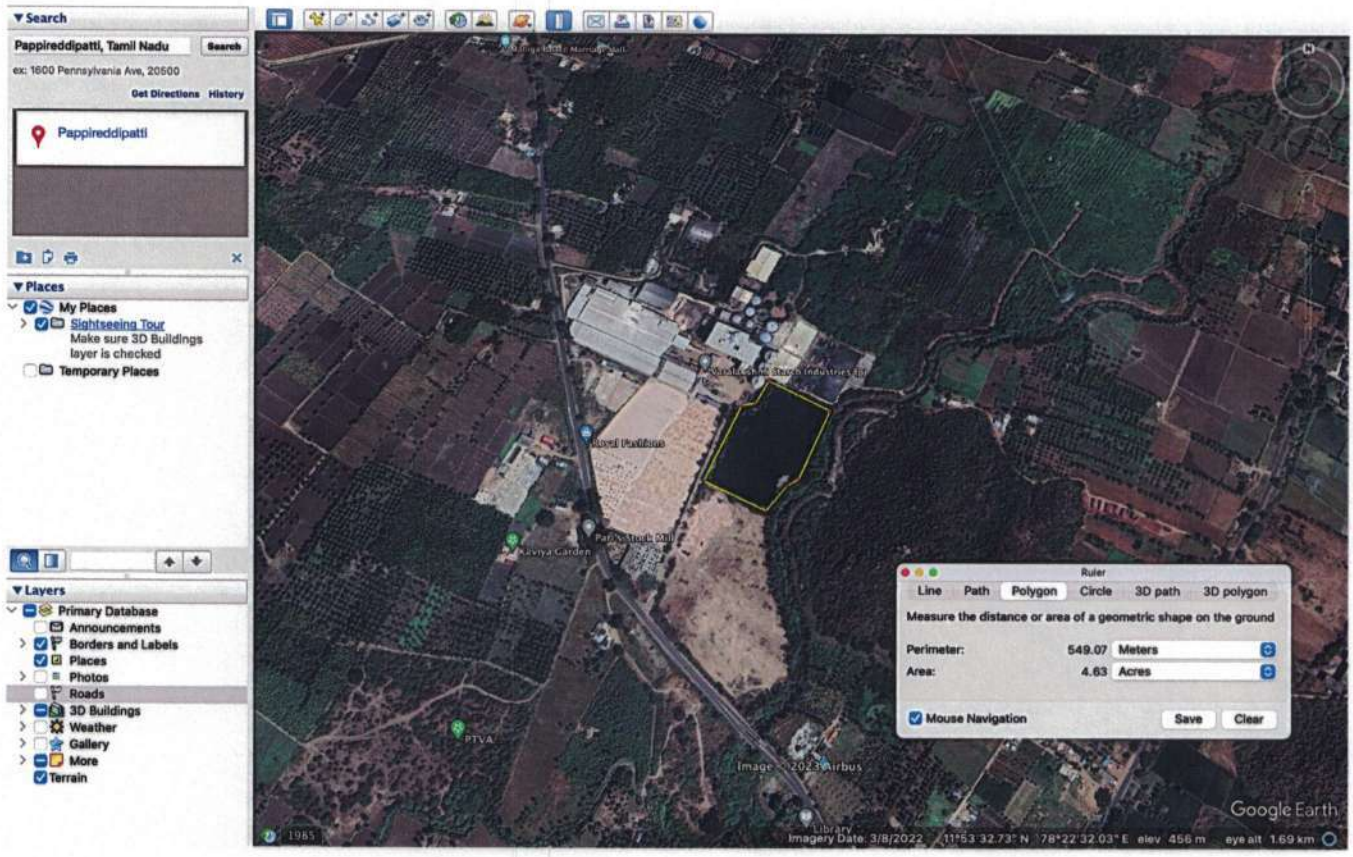
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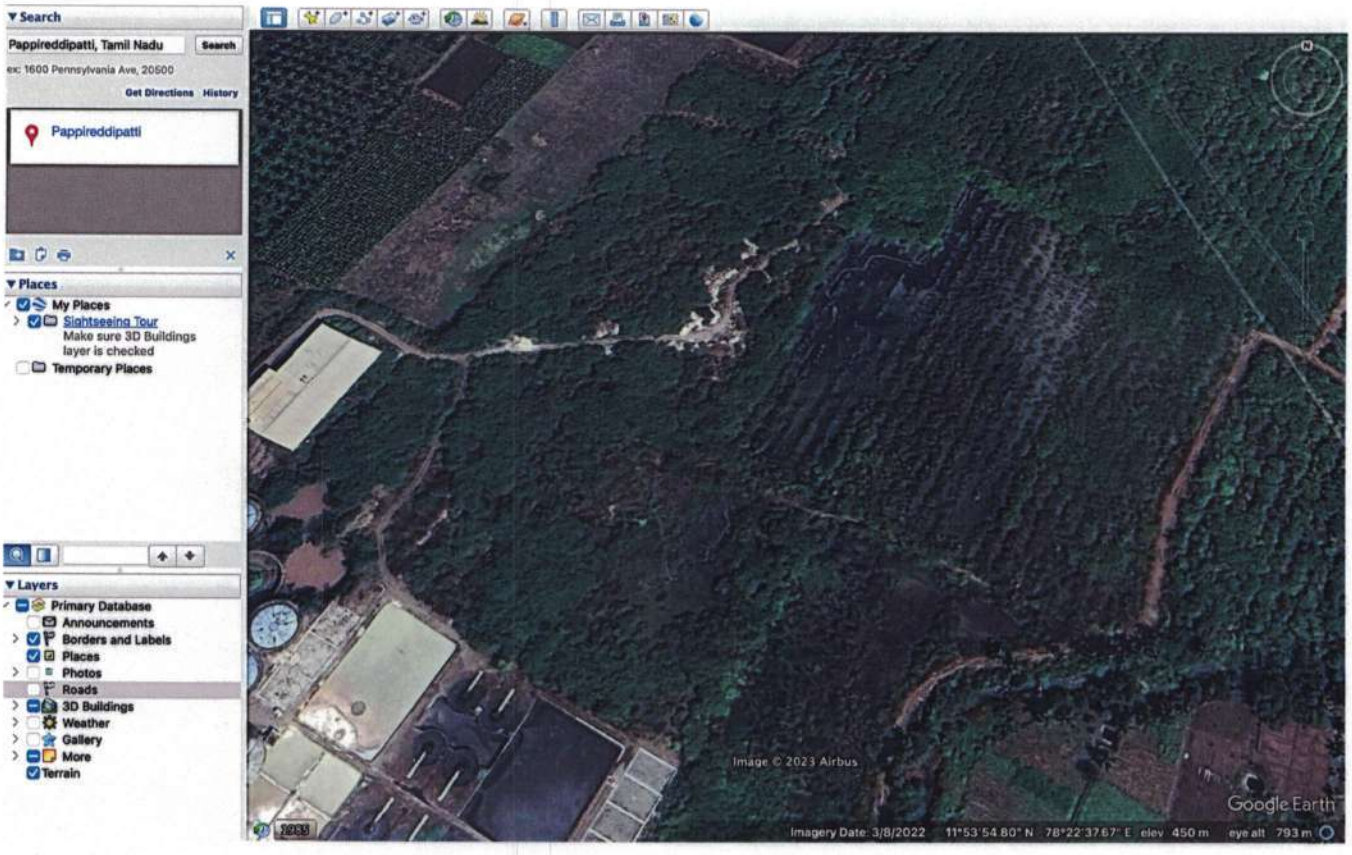
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(177)

நாள்: 02-11-2022
இடம்: அலமேலுபுரம்

பதிவு அஞ்சல் ஒப்புகை அட்டையுடன்

அனுப்புதல்: செல் எண்:9361380047

சுரேஷ் S/O பச்சையப்பன்,
ஒருங்கிணைப்பாளர்
பீணியாறு பாதுகாப்பு விவசாய இயக்கம்,
அலமேலுபுரம் அஞ்சல்,
பாப்பிரெட்டிப்பட்டி வட்டம்,
தர்மபுரி மாவட்டம்
[redacted]-636905

பெறுநர்;

இணை தலைமை சுற்றுசூழல் பொறியாளர் (கண்காணிப்பு),
தமிழ்நாடு மாசுக்கட்டுப்பாடு வாரியம் ,
வேலூர்.-632006

பொருள்:

பீணீ ஆற்றங்கரையை அக்கரமித்து சட்ட விரோதமாக இயங்கி வரும் வரலக்ஷ்மி கிழங்கு (ம) மாக்காட்சோள அரவை ஆலை அரசு நிர்ணையித்த அளவுக்கு அதிகமாக அரவை செய்வதால் பெருமளவில் வெளியேறும் ரசாயன கழிவுகள் முழுவதும் பீணியாற்றில் விடப்படுகிறது.எனவே இதன் உரிமத்தை ரத்து செய்து இந்த ஆலையை நிரந்தரமாக மூட வேண்டி மனு.

ஐயா,

தர்மபுரி மாவட்டம் பாப்பிரெட்டிப்பட்டி வட்டம் & டவுன் பஞ்சாயத்து 9 - ஆவது வார்டில் அலமேலுபுரம் கிராமத்துக்கு உட்பட்ட இடத்தில் வரலக்ஷ்மி கிழங்கு மற்றும் மக்காசோளம் அரவை ஆலை பீணீ ஆற்றங்கரையை அக்கிரமித்து சுமார் 110 ஏக்கர் பரப்பளவில் மிகப் பெரிய அளவில் அமைந்துள்ளது.இந்த ஆலை அரசு நிர்ணயம் செய்த அளவுக்கு அதிகமாக அரவை

அமைந்துள்ளது.இந்த ஆலை அரசு நிர்ணயம் செய்த அளவுக்கு அதிகமாக அரவை செய்து வெளிவரும் அளவுக்கு அதிகமான ரசாயன கழிவு நீர் முழுவதும் பிணியாற்றில் விடப்படுகிறது ,இந்த ஆலைகக்கு தர்மபுரி மாசுக்கட்டுப்பாட்டு வாரியம் துணை போகிறது.பொதுமக்கள் பலமுறை மனு கொடுத்தும் இதுவரை எந்த ஒரு நடவடிக்கையும் மாசுக்கட்டுப்பாட்டு வாரியத்தால் எடுக்கபடவில்லை.

1 .வரலக்ஷ்மி நிர்வாகம் சுமார் 5 ஏக்கர் பரப்பளவில் மிகப்பெரிய கிணறு வெட்டி பீணீயாற்றுக்கும் கிணற்றுக்கும் இடையில் பூமிக்கு அடியில் பல துளையிட்டு ஆற்றுத்தண்ணீர் முழுவதும் கிணற்றை நிரப்பிக்கொண்டு ஆலையை இயக்கி வருகின்றனர்.

2. தர்மபுரி TO சேலம் மெயின் ரோடுக்கு அருகில் சுமார் 10 ஏக்கர் பரப்பளவில் சிமெண்ட் களம் அமைத்து அதிக அளவில் கிழங்கு துப்பிகளை காயவைக்க படுவதால் ரோட்டில் பயணம் செய்ய முடியாத அளவிற்கு தூர் நாற்றம் வீசு கிறது.

3. அரசு அரசு நிர்ணயித்த அளவுக்கு அதிகமாக கிழங்கு மற்றும் மக்காச்சோளம் அரவை செய்கின்றனர் .நாள் ஒன்றுக்கு சுமார் 120 லாரி கிழங்குக்கு மேல் அரவை செய்வதால் ரசாயன கழிவுநீர் அதிக அளவில் வெளியேறுகிறது.

4. பீணீயாற்றங்கரையைஆற்றங்கரையை ஆக்கிரமித்து சுமார் 70 ஏக்கர் பரப்பளவை சுற்றிலும் கரையை அமைத்து கருவேல முட்புதருக்குள் சுமார் 8 அடி ஆழத்திற்குசுத்திகரிக்கப்படாத ரசாயன கழிவுநீர் தேக்கி வைத்துள்ளனர்.இதனால் கிழங்கு அரவை ஆலையை சுற்றளவில் சுமார் 3 கிலோ மீட்டர் தூரத்திற்கு நிலத்தடி நீர் மாசு ஏற்பட்டுள்ளது. இதனால் விவசாய பயிர்கள் கருகி மகசூல் இழப்பு ஏற்பட்டுள்ளது. மேலும் இதனை உட்கொள்ளும் கால்நடைகள் மற்றும் பொதுமக்களுக்கு பல வியாதிகள் ஏற்படுகிறது.

5. 70 ஏக்கர் பரப்பளவில் கருவேல முள் புதர்க்குள் தேக்கி வைக்கப்பட்டுள்ள ரசாயன கழிவுநீர் முழுவதும் அருகில் உள்ள பீணீயாற்றில் விடுவதால் ஆற்றில் துர்நாற்றம் அடிப்பதோடு, ஆற்றில் வாழும் நீர்வாழ் உயிரினங்கள்(மீன்கள் தவளை) முழுவதும் இறந்து விடுகின்றது இதனால் பீணீயாரு மிகுந்த அளவில் மாசடைந்து வருகின்றது.

6.கிழங்கு அரவை ஆலையிலிருந்து சுமார் அரை கிலோ மீட்டர் தொலைவில் ஏரிக்கு தண்ணீர் செல்வதற்கு தடுப்பணை உள்ளதால் தடுப்பணையிலிருந்து ஐந்து ஏரிகளுக்கு பீணீ ஆற்று தண்ணீர் செல்கிறது

1. அலமேலுபுரம் -வண்ணான் ஏரி 35 ஏக்கர்
2 ஏ. பள்ளிப்பட்டி -பெரிய ஏரி 110 ஏக்கர்
3. ஏ பள்ளிப்பட்டி- சின்னேரி- 30 ஏக்கர்
4. அதிகாரப்பட்டி பனமரத்து ஏரி 40 ஏக்கர்.
5. காணியம்மன் குட்டை- 2 ஏக்கர்

ஆகிய நீர்நிலைகள் மற்றும் அவைகளுக்கு செல்லும் ஆற்று வழித்திடங்கள் முழுவதும் கருமையான நிறத்துடன் செல்லும் ரசாயன கழிவு நீரால் மாசு ஏற்பட்டு ஆற்றுக்கு அருகில் உள்ள கிணற்றுகளில் உள்ள நீரும் மாசு அடைந்து, கிணறுகளில் உள்ள நீர்வாழ் உயிரினங்களும் இறந்து துர்நாற்றம் வீசுகிறது. கிணற்று நீரைஉட்கொள்வதால் கால்நடைகளுக்கும் பொது மக்களுக்கும் மிகுந்த பாதிப்பு ஏற்பட்டு வருகிறது.

மேற்படி ஏரிகள் மூலம் பாசன ஹ வசதி பெரும் விவசாய நிலம் ரசாயன கழிவு நீரால் பாதிப்படைகிறது மேலும் ஏரிகளில் உள்ள நீர்வாழ் உயிரினங்களும் மீன்கள் கழிவு நீரினால் இறந்து துர்நாற்றம் வீசுகிறது.

7. பீணி ஆற்றில் விடப்பட்ட கழிவு நீரால் ஏரியை சுத்தி உள்ளதால் அந்த ஏரியை நம்பியுள்ள7000 ஏக்கர் விலை நிலம் ,சுமார் 10,000 பொதுமக்கள் மற்றும் கால்நடைகள் ரசாயன கழிவு நீர் மூலம் பாதிக்கப்பட்டுள்ளனர். இந்த ரசாயன கழிவு நீரினால் பொது மக்களுக்கு சரும,வியாதிகள்,தோல்,அலர்ஜி ஒவ்வாமை தும்மல் தலைவலி போன்ற பாதிப்பு ஏற்பட்டுள்ளது.

8. வரலட்சுமி நிர்வாகம் பெயருக்கு மட்டும் கழிவு நீர் சுத்திகரிப்பு நிலையம் வைத்துள்ளது சுத்திகரிக்கப்படுவதில்லை ஆலையில் இருந்து வெளிவரும் முழு ரசாயன கழிவுகளும் ஆற்றில் விடப்படுகிறது இதனால் ஆற்றங்கரையிலும் ஓரங்களில் உள்ள செடிகளும் ரசாயன கழிவுகள் வழவழப்பாக ஒட்டி கொண்டுள்ளது

எனவே பீணி ஆற்றை ஆக்கிரமித்து சட்டவிரோதமாக இயங்கும் வரலட்சுமி கிழங்கு மக்காச்சோளம் உரிமத்தை ரத்து செய்வதோடு நிரந்தரமாக மூடுவதற்கு வழிவகை செய்து தாங்கள் பீணி ஆற்றையும் ஏரியையும், விவசாயத்தையும் ,பொதுமக்களையும் ,கால்நடைகளையும் மற்றும் எங்களின் வாழ்வாதாரத்தையும் மேம்படுத்தி தருமாறு பொதுமக்களின் சார்பாக தங்களை மிகவும் பணிவுடன் கேட்டுக்கொள்கிறோம்.

நன்றி

இப்படிக்கு
தங்கள் உண்மையுள்ள,

P. Suresh

இணைப்பு:

1) 5.3. 2022 தேதியிட்ட எங்கள் புகார் மனு
2) 25 3 2022 தேதியிட்ட எங்கள் புகார் மனு
3) 14 6 2022 தேதியிட்ட எங்கள் புகார் மனு
4) 02.09.22 தேதியிட்ட எங்கள் புகார் மனு
5) 7.10.22 தேதியிட்ட எங்கள் புகார் மனு
6) பீணி ஆற்றில் விடப்பட்ட கழிவுநீர் புகைப்படம் (CD-COPY).

To:

முதன்மை நிலைமைப் பொறியாளர்
நீர்வள ஆதார அமைப்பு மற்றும்
நிலைமைப் பொறியாளர் (பொது)
பொதுப்பணித்துறை சேப்பாக்கம்
சென்னை - 600005

கண்காணிப்புப் பொறியாளர்,
பொது,
நீர்வள ஆதார அமைப்பு,
பொன்னையாறு வழுதின வட்டம்.

(181)

RT601605353IN IVR:8284601605353
RL PAPPIREDDIPATTI S.O <636905>
Counter No:1,02/11/2022,10:56
To:JOINT CHEIF E.TN POLLUTION CON
PIN:632006, Gandhinagar S.O (Vellore)
From:SURESH.ALAMELUPURAM
Wt:142gms
Amt:60.00(Cash)
<Track on www.indiapost.gov.in>

Wear Masks. Stay Safe>

RT601605340IN IVR:8284601605340
RL PAPPIREDDIPATTI S.O <636905>
Counter No:1.02/11/2022.10:56
To:HEAD OFFICE.TN POLLUTION CON
PIN:600032, Guindy Industrial Estate S.O
From:SURESH.ALAMELUPURAM
Wt:140gms
Amt:55.00(Cash)
<Track on www.indiapost.gov.in>
<Dial 18002666868> <Wear Masks. Stay Safe>

182

ON POSTAL SERVICE

भारतीय डाक
India Post

Sender's address

சதீஷ் S/o பிச்சையப்பன்.
அதலையூர் (Po) மாம்பாக்கம் (TK)
செய்யூர் (D.t)

PIN 6 3 6 9 0 5

Name - Stamp of office of posting

Space for Bar Code Printing

Please do not write or print below this line

GMGIPN–124/PSD/MADURAI/2021 – 30,66,000 Cards

183

आरoपीo-54
R.P.-54

भारतीय डाक विभाग
DEPARTMENT OF POSTS, INDIA
प्राप्ति स्वीकृति/ACKNOWLEDGEMENT

* अनावश्यक को काट दिया जाए
* Strike out if not relevant

रजिस्ट्री-पत्र/पार्सल प्राप्त हुआ
Received Registered Letter/Parcel

क्रमांक/No.	तारीख/Dated	का/of

* बीमे का मूल्य रुपयों में
* Insured for Rupees

पाने वाले
Addressed to

[illegible] (signature)

वितरण डाकघर की तारीख-मोहर
Date Stamp of office of delivery

हस्ताक्षर और नाम/Signature and Name

184

ON POSTAL SERVICE

भारतीय डाक
India Post

Name - Stamp of office of posting

Sender's Address

PIN 6 3 6 9 0 5

Space for Bar Code printing

Please do not write or print below this line

(195)

आरपी. 54
R.P.-54

PSD.MDU/LP/J7/RP-54/18,00,000 Copies/Techno Graphics, Ahm

* अनावश्यक को काट दिया जाए
* Strike out if not relevant

भारतीय डाक विभाग
DEPARTMENT OF POSTS, INDIA

प्राप्ति स्वीकृति / ACKNOWLEDGEMENT

रजिस्ट्री-पत्र/पार्सल प्राप्त हुआ
Received Registered Letter/Parcel

क्रमांक/ No.	तारीख/Dated	का/of

* बीमे का मूल्य रुपयों में
* Insured for Rupees
पाने वाले
Addressed to தலைமை அலுவலகம் / Head Office
தபிழ் நாடு மாநில கூட்டுறவு வங்கி
का/On No - 76 மூவர்கோவில் சாலை, கீழ்பாக்கம் சென்னை 600032

03 NOV 2022

वितरण डाकघर की तारीख-मोहर
Date Stamp of office of delivery

हस्ताक्षर और नाम / Signature and Name

(186)

நாள்: 5-3-2022
இடம்: அலமேலுபுரம்

அனுப்புதல்

பீனி ஆறு பாதுகாப்பு விவசாயிகள் இயக்கம்,
சுரேஷ் (9361380047),
த/பெ பச்சையப்பன்,
ஒருங்கிணைப்பாளர்,
6/36 அலமேலு புரம் கிராமம் & அஞ்சல்,
பாப்பிரெட்டிப்பட்டி வட்டம்,
தர்மபுரி மாவட்டம்.

பெறுதல்

உயர்திரு மாவட்ட ஆட்சியர் அவர்கள்,
மாவட்ட ஆட்சியர் அலுவலகம் ,
தர்மபுரி.

பொருள்:

பாப்பிரெட்டிப்பட்டி வட்டம் & பேரூராட்சி, அலமேலுபுரம் கிராமத்திலுள்ள பீனி ஆற்று நீரை கிராம பொதுமக்களும் . விவசாய குடிமக்களும் பயன்படுத்த குந்தகம் விளைவிக்கும் வகையில், வரலட்சுமி ஸ்டார்ச் ஆலை ரசாயன கழிவு நீரை பீனி ஆற்றில் கலக்க செய்து ஏரி, குளம். கிணறு ஆகியவற்றில் தண்ணீர் பாதிக்கப்பட்டு, இதனால் குடிநீர் வாழ்வாதாரம் பாதிப்பு, ,விவசாய பாதிப்பு, உயிர் சேதம் போன்றவைகளை தடுத்து நிறுத்தி காத்து பேருதவி செய்ய வேண்டி மனு.

மதிப்பிற்குரிய மாவட்ட ஆட்சியர் அம்மா அவர்கள்:

பாப்பிரெட்டிப்பட்டி வட்டம் & பேரூராட்சி அலமேலுபுரம் பகுதியில் பீனி ஆறு செல்கிறது, இந்த ஆற்று நீர் ஆதாரம் மூலம் அலமேலுபுரம் வண்ணான் ஏரி, அ.பள்ளிப்பட்டி பெரிய ஏரி, சின்ன ஏரி அதிகாரப்பட்டி பனமரத்து ஏரி, இருளப்பட்டி காணியம்மன் குட்டை ஆகிய ஏரிகளுக்கு தண்ணீர் சென்று நிரம்பி இதன் மூலம் மேற்படி பகுதி விவசாயிகள் விவசாயம் செய்தும், பொதுமக்கள் குடிநீர் ஆதாரமாகவும் பயன்படுத்தி வருகின்றனர். இந்த நிலையில் அலமேலுபுரம் பீனி ஆற்றுக் கரை ஓரம் உள்ள வரலட்சுமி ஸ்டார்ச் மில் நிர்வாகம், ஆற்று நீரை விவசாயிகள் பயன்பாட்டிற்கும், குடிநீர் பயன்பாட்டிற்கும், இடையூறு மற்றும் நீர் பற்றாக்குறை ஏற்படும் வகையில் மேற்படி ஆலை நிர்வாகம்

P.T.O

சட்டவிரோதமாக சுமார் 10 ஏக்கர் நிலப்பரப்பில் 70 அடி ஆழம் கொண்ட மிகப்பெரிய குட்டையை வெட்டி, அதில் ஆற்று நீரை நிரப்பி சேகரித்து வைத்து அவர்களின் தொழிற்சாலையில் தேவைக்கு பயன்படுத்தி, அதன் பிறகு அதிலிருந்து வெளியேறும் ரசாயன கழிவு நீரை மீண்டும் ஆற்றில் நேரடியாக விடுவதால், கிராம பொது மக்கள் குடிப்பதற்கும் கால்நடைகள் குடிப்பதற்கும், குடிநீர் ஆதாரம் பாதிக்கப்பட்டும், விவசாய தொழில் பாதிப்பு ஏற்பட்டும் ,மக்களின் வாழ்வாதாரம் பாதிப்படைந்துள்ளது

மேலும் குறிப்பிட்டு கவனிக்க வேண்டிய முக்கிய விஷயம் என்னவென்றால், தொழிற்சாலை கழிவு நீரை மிகப் பெரிய பரப்பில் தேக்கிவைத்து, ஆற்றில் விடுவதால் நிலத்தடி நீர் மிகவும் மோசமான நிலையில் பாதிக்கப்பட்டுள்ளது.

இதனால் மேற்படி கிராமங்களில் உள்ள சுமார் 10 ஆயிரம் ஏக்கர் விவசாய நிலங்கள், இதை நம்பியுள்ள சுமார் 20 ஆயிரம் விவசாய குடும்பங்கள், பொதுமக்கள், குடிநீர் ஆதாரம் பாதிக்கப்பட்டு, விவசாய தொழில் பாதிக்கப்பட்டு, மக்களின் வாழ்வாதாரம் கேள்விக்குறியாகி உள்ளது. இதுகுறித்து பலமுறை சம்பந்தப்பட்ட அதிகாரிகளுக்கு புகார் மனு கொடுக்கப்பட்டும் எவ்வித நடவடிக்கையும் எடுக்கப்படவில்லை என்பதை வருத்தத்துடன் தெரிவித்துக்கொள்கிறோம்.

பாதிப்புகளின் சுருக்கம்

- ஆற்றுநீர் விவசாய பயன்பாட்டிற்கும் குடிநீருக்கும் பற்றாக்குறை,
- ரசாயன கழிவுநீர் பீனி ஆற்றில் விடுவது ,
- ரசாயன கழிவு நீரால் கிணறு ஏரி குளம் ஆகியவைகளின் நீர் கெட்டுப்போதல்,
- கால்நடைகளுக்கு வியாதி மற்றும் உயிர்ச்சேதம்,
- கிராம மக்களுக்கு சரும வியாதி பேதி மற்றும் தொற்று நோய் பாதிப்பு,
- மண் வளம் மலட்டுத் தன்மை அடைதல்,
- விவசாய பயிர்கள் கருகி விளைச்சல் பாதிப்பு,
- நீர் ,மண்வளம் மற்றும் காற்று மாசுபடுதல்,

இதுபோல இன்னும் பல குறைபாடுகள்.

P.T.O

மேற்குறிப்பிட்டுள்ள இம்மாதிரியான பாதிப்புகளினால் கிராம மக்கள் மற்றும் விவசாயிகளின் வாழ்வாதாரம் முற்றிலும் பாதிக்கப்பட்டுள்ளது. இத்தகைய கடுமையான பாதிப்பு நிலையை கருத்தில் கொண்டு தாங்கள் இந்த மனு மீது போர்க்கால அடிப்படையில் நேரடி ஆய்வு செய்தும், எங்களுடன் நேரில் கலந்து பேசியும் மேற்குறிப்பிட்டுள்ள கிராமமக்கள் மற்றும் விவசாய குடும்பங்களின் வாழ்வாதாரம் காக்க தகுந்த நடவடிக்கை எடுத்து உதவுமாறு தங்களை மிகவும் பணிவன்புடன் கேட்டுக் கொள்கிறோம்.

இப்படிக்கு ஒருங்கிணைப்பாளர்

P-Suresh

பீனி ஆறு பாதுகாப்பு விவசாயிகள் இயக்கம்,.

அலமேலுபுரம்

5.3.2022

PRESIDENT
A. Pallipatti Panchayat
Pappireddipatti Union

PRESIDENT
Irulapatti Panchayat
Pappireddipatti Union.
Dharmapuri.

இணைப்பு :

1. கூகுள் வரைபடம் குறிப்பு சுட்டிக்காட்டப்பட்டுள்ளது .
2. 10.10.2001 தேதியிட்ட எங்களின் புகார் மனு.
3. 12.11.2007 தேதியிட்ட எங்களின் புகார் மனு .
4. விவசாய பயிர் சேதம் புகைப்படங்கள்.
5. பீனி ஆற்றில் கழிவுநீர் நீரோட்ட புகைப்படம்.
6. பீனி ஆற்று தடுப்பணையில் கழிவுநீர் தேக்க புகைப்படங்கள்.
7. பீனி ஆற்று நீர் தேக்கத்தில் நீர்வாழ் உயிரினங்கள் இறப்பு புகைப்படம்.

நகல்கள் :

1. தமிழக முதலமைச்சரின் தனிப்பிரிவு (CM CELL) - சென்னை.
2. தமிழ்நாடு அரசு நீர்வளத்துறை அமைச்சர் - சென்னை
3. மாவட்ட காவல் கண்காணிப்பாளர் அவர்கள் -தர்மபுரி.
4. மாவட்ட வருவாய் அலுவலர் அவர்கள்- தருமபுரி .
5. கோட்ட பொறியாளர் அவர்கள் ,மாசுக் கட்டுப்பாட்டு வாரியம் தர்மபுரி
6. வட்டாச்சியர் அவர்கள் -பாப்பிரெட்டிப்பட்டி.
7. வட்டார வளர்ச்சி அலுவலர் அவர்கள் -பாப்பிரெட்டிப்பட்டி.
8. பொதுப்பணித் துறை நீர்வள ஆதாரம் அலுவலர் அவர்கள் பாப்பிரெட்டிப்பட்டி
9. தனி அலுவலர் அவர்கள் பேரூராட்சி -பாப்பிரெட்டிப்பட்டி .
10. கிராம நிர்வாக அலுவலர் அவர்கள் - பாப்பிரெட்டிப்பட்டி.

R. Rajeshwari

S. Rose Mary

P. [illegible]

M. [illegible]

R. Sundaravadivel

C [illegible]

V- [illegible]

S. [illegible]

S- [illegible]

A- Jayaraj

J- [illegible]

N. Karnan

P. [illegible]

P. [illegible]

C. Ramalingam

[illegible]

[illegible]

[illegible]

S/o Annamalai

[illegible]

R. Rajeshwari

S. Rose mary

P. [illegible]

M. [illegible]

P. [illegible]

C [illegible]

S. [illegible]

S. Kalaiselvi

A- [illegible]

A- [illegible]

பயிற்சி மையம் - திரு.வி.க. அரசு மேல்நிலைப் பள்ளி

வகுப்பு	பயிற்சி நாள்	கையொப்பம்
அறிவியல் -	இயற்பியல்	
P. கோபிநாத்.	K. முத்துராஜ்	
R. Karthiksaran	E. நாகராஜன்	
C. மணி	சின்னபையன்.	
M. சின்னதம்பி	மாரப்பன்	
R. [illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
M. [illegible]	[illegible]	
D. [illegible]	[illegible]	
G. Venkatesan.	P. Govindasamy	
P - [illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
K. Mani - [illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	

பயிற்சிப்பட்டறை - தேசிய - சர்வதேசிய நிகழ்வு

வகை	ஒப்பம்	தந்தை வகை	கையொப்பம்
வணிகவியல் -		இளங்கோ	
P. தமிழ்செல்வி		K. முருகன்	
R. Karthiksaran		E. நாகராஜன்	
C. மணி		சின்ன பையன்.	
M. சின்னதம்பி		மாரப்பன்	
R. சிவசுந்தரம்		Ramasamy.	
V. [illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
M. இளவரசு		[illegible]	[illegible]
D. முருகன்		[illegible]	
G. Venkatesan.		P. Govindasamy	G. Venkatesan.
P - நேரு		பிச்சமுத்து	P. நேரு
R. கிருஷ்ணன்		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
K. Mani - [illegible]		[illegible]	K. Mani
திருவுண்ணி		சிப்பி உடையர்	[illegible]
M. கார்த்திக்		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
வணிகவியல்			

பெயர்	தீபை	கையொப்பம்
E. Raghupathy	Egambaram	E Raghupathy
T. ஏகாம்பரம்	சாரதாவுண்டர்	T. ஏகாம்பரம்
V. கோவிந்தன்	வேங்கய கவுண்டர்	V. கோவிந்தன்
K. திப்பம்மாள்	நாடமுடி	K. திப்பம்மாள்
G. நீலா	கோவிந்தன்	G. நீலா
S. சுலோசனா	சந்தாகிவம்	S. சுலோசனா
S. கமலாதன்	முண்முகம்	S. Kamalathan
G. கண்ணம்மாள்	கோவிந்தன்	G. Kannammal
S. பொன்னுதாய்	கணேசன்.	S. Ponnuthai
K. கணேசன்	கரும்பன்னாகவுண்டர்	K. Ganesan
S. லட்சுமி	கணேசன்	S. Lakshmi
S. தாண்டவர்	பொன்னுதாய்	S. Thandavar
G. சுப்பிரமணி	கணேசன்	G. Subramani
K. ராமகிருஷ்ணன்	K. ராமகிருஷ்ணன்	K. Ramakrishnan
M. கனகச்செல்வி.	வயசு	M. Kanakachelvi.
P. Ponni	ராமசாமி	P. Ponni
இந்திரா	நாயகர்	R. Nirmala.
K. PREMA	மாதர்	K. Prema.
M. ராஜேஸ்வரி	சண்முகம்	M. ராஜேஸ்வரி
திருநாவுக்கரசு, ராமன்	ராமன்	S. ராமன்
பச்சையம்மாள்		பச்சையம்மாள்

அதிகாரபூர்வ நிலவம்

பெயர்	தந்தை பெயர்	கையொப்பம்
A. Anbukannan.	C. Ashokan.	A. Anbukannan
M. Manikandan	N. Murugesan	M. Manikandan
வே. அதியமான்	வேடியப்பன்	வே. அதியமான்
S. அன்பழகி	அமலதாஸ்	S. அன்பழகி
V. சின்னராசு	வேடியப்ப கவுண்டர்	V. சின்னராசு
~~தனசேகரன்~~ கோபிநாத்	தாண்டவராயன்	T. கோபிநாத்
V. தனபாலன்	வைரவேலாயுதம்	V. தனபாலன்
M. தினகரன்	மோகன்	M. தினகரன்
T. தமிழ்மாறன்	தினகரன்.	T. தமிழ்மாறன்
S. கோபிநாத்	K. சம்பத்	S. கோபிநாத்
V. Vijayan	வைத்தியர்	V. விஜயன்
தனபால்	ஸ்ரீ வேதபுரி	தனபால்
பூர்ணா	ஜெயராஜ்	A. பூர்ணா
G. Manimozhi.	கோபால்	G. Manimozhi
மணி	அண்ணா கோபால்	A. மணி
பிரகாஷ்	பழனி	வெற்றி
பிரபு	S/o சிவன்	பிரபு

நாராயணசாமி	மாணிக்கம்	நாராயணசாமி
பிரபாகரன்	வேலாயுதம்	வேலு
J. Arul Murugan	V. Jayaraman	J. Arul Murugan
S. Chinnadurai	Sennan	S. Chinnadurai
ஆனந்தன்	தென்னரசு	ஆனந்தன்
C. Thillikumaresi	திலகவதி	C. Thillikumaresi
K. மணிகண்டன்	தேவதாஸ்	K. Manikandan
M. vinodh	K. madhavaiah	M. vinodh
பாண்டியன்	சின்னதுரை	பாண்டியன்
Vijaya	வெங்கட்டபதி	Vijaya
ஜெகதீசன்	சகதேவன்	ஜெகதீசன்
S. திலகவதி	திலகவதி	S. Thilagavathi
M. நாராயணன்	மொட்டையன்	M. நாராயணன்
R. சந்திரன்	ஜோதிலட்சுமி	R. Chandran
ராமசாமி	வேடியப்பன்	V. Ramasamy
T. V. S. இளங்கோவன்		T. V. S. இளங்கோவன்
திருமலை	ஆனந்தன் @ அரசன்	

அனுப்புதல்

வே.இளங்கோவன், ...
த/பெ. வேடியப்பன்,
முன்னாள் மாவட்ட காங்கிரஸ் தலைவர், அகில இந்திய விவசாயிகள் மாவட்ட தலைவர்,
அகில இந்திய காங்கிரஸ் கமிட்டி உறுப்பினர்,
அதிகாரப்பட்டி (அஞ்சல்)
பாப்பிரெட்டிப்பட்டி (வட்டம்),
தருமபுரி மாவட்டம். (மற்றும்)
பாப்பிரெட்டிப்பட்டி, அதிகாரப்பட்டி, அ. பள்ளிப்பட்டி, சமத்துவபுரம்,
கோட்டமேடு, மாரியம்பட்டி, இருளப்பட்டி, கவுண்டம்பட்டி, முதுகா-
ரெட்டிப்பட்டி, புதுபட்டி, பாப்பம்பாடி, கிராம ஊர் பொது மக்கள்.

பெறுதல்

உயர்திரு. மாவட்ட ஆட்சித் தலைவர் அவர்கள்,
மாவட்ட ஆட்சியர் அலுவலகம்,
தருமபுரி.

அய்யா,

பொருள்: பாப்பிரெட்டிப்பட்டி தரப்பிலுள்ள மீ வரலட்சுமி டிவார்சு இண்டஸ்ட்ரீஸ் அனுமதியின்றி ஆற்று புறம்போக்கை பெரிய குளம்வெட்டியும், ஆற்று நீரை உபயோகிப்பது, குடிநீர், விவசாயம், சுகாதாரம் பாதிப்பது - சம்மந்தமாக மனு செய்வது.

பாப்பிரெட்டிப்பட்டி வட்டம், பாப்பிரெட்டிப்பட்டி தரப்பிலுள்ள மீ வரலட்சுமி டிவார்சு இண்டஸ்ட்ரீஸ் கிழக்கு மேல் உள்ளது. மேற்படி மில்லிக் ஒரம் வரட்டாறு உள்ளது. மேற்படி ஆற்றை ஒட்டி ஆற்று புறம்போக்கை யும் சேர்த்து சுமார் 15 ஏக்கர் பரப்பில் சுமார் 30 அடி ஆழம் உள்ள பெரிய குளம் வெட்டியுள்ளார். மேற்படி ஆற்றின் குறுக்கே பெரிய தடுப்பு அணை ஏற்படுத்தி வரட்டாற்றில் வரும் நீர் முழுவதும் மேற்படி குளத்திற்கு திருப்பி விட்டுள்ளார்.

தற்போது வந்த நீர் முழுவதும் குளத்திற்கே சென்று விட்டது. இனி வரும் நீரும் குளத்திற்கு செல்லும். ஆற்றில் அணை இருப்பதால் நீர் வரத்து ஆற்றுக்கு வராது. அதனால் எரி நிரம்பாது. அதனால் இரண்டாவது போக சாகுபடியும் விவசாயிகளாகிய எங்களுக்கு பாதிப்பை ஏற்படுத்தும்.

இதனால் வரட்டாற்றின் மூலம் நீர் ஆதாயம் பெறும் சுமார் 6 ஏரிகள் 1. பெரியேரி, 2. சிக்னேரி, 3. பனமரத்துஏரி, 4. வன்னாத்தேரி, 5, இருளப்பட்டி குட்டை (இரண்டு). இதனால் குடிநீருக்கான எரிபாசன நன்செய நிலங்கள் முதல்போக சாகுபடி செய்ய முடியவில்லை. இதனால் விவசாயிகளுக்கு ஏற்பட்டுள்ள இழப்பை ஈடுசெய்வது/ அல்லது வரலட்சுமி டிவார்சு இண்டஸ்ட்ரீஸ் தனியார் நிர்வாகமா? நீர் வரத்து இல்லாமல் விவசாயம் பாதிப்பு அடைந்துள்ளது இது சட்டவிரோதமான செயலாகும்.

...2./

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ஸ்ரீ வரலட்சுமி சீடாச்சிக கிழக்கு மில் உரிமையாளர் மேற்படி இராசயன கழிவு நீர் வறட்டாற்றில் விடுவதின் மூலம் குடிநீர் மாசபடுகிறது. இதனால் 15 கிராமங்கள் குடிநீர் பயன்படுத்த முடியாத கலீடப்படுகிறார்கள். மேற்படி இராசயனம் கலந்த கழிவு நீர் ஆற்றின் மூலம் விடுவதால் கழிவு நீர் ஏரிகளுக்கு செல்ல ஏரிகள் மூலம் விவசாயத்திற்கு நீர் பாய்வதால், நல்ல நிலங்கள் முழுவதும் உவர் நிலங்களாக மாறி வருவதோடு பயிர்கள் சேதமாகி விவசாயம் பாதித்து விடுகிறது.

மேற்படி மில்லின் இராசாயன கழிவு நீர் அரவையின் போது ஆற்றில் விடுவதால் நில மற்றும் ஏரிகளில் உள்ள மீன் இனங்கள் இறந்து சுற்றாற்றம் ஏற்படுகிறது. இந்த நீரை குடிக்கும் கால்நடைகள் பாதிப்பு அடைகிறது. ஆற்றின் ஓரம் உள்ள கிணற்றின் மூலம் விவசாயம் செய்யும் விவசாயிகள் இராசாயன கழிவு நீர் ஆற்றில் வருவதால் கிணற்று நீர் முழுவதும் கெட்டுவிடுகிறது. இதனால் இவர்கள் குடிநீருக்கு பயன்படுத்த முடியவில்லை. விவசாயம் செய்தால் விவசாய பயிர்கள் மடிந்து விடுகின்றது.

மேற்படி மில் அரவையின் போது எற்படும் சுற்றாற்றம் சுமார் 15 கி.மீ. தூரம் ஏற்படுகிறது. இதனால் பல தொற்று நோய்கள் பரவி மக்கள் பெரிதும் அவதிப்படுகின்றனர்.

மேற்படி மில்லின் உரிமையாளர் ஆற்று புறம்போக்கு நிலத்தையும் சேர்த்து பெரிய தடமாக வெட்டியுள்ளதால் மழைக்காலங்களில் திரட்டிய வரும் வெள்ளம் மேற்படி தடத்தில் புகுந்து நிரம்பி, திரட்டி உடைந்தால் ஆற்றின் ஓரங்களில் உள்ள கிராமங்கள் அனைத்தும் வெள்ள சேதம் ஏற்பட வாய்ப்புள்ளது.

மேற்படி மில்லின் உரிமையாளர் செய்யும் சட்டவிரோத செயலால் குடிநீர் மாசபடுவதால் பாதிப்பு, விவசாயிகள் நீர் வரத்து இல்லாததாலும், கழிவு நீர் வருவதாலும் விவசாயம் செய்ய முடியாத சூழ்நிலை, காற்று மாசு படுவதால் சுகாதாரம் சீர் கெட்டு வரும் நிலை, மீன் மற்றும் கால்நடை பாதிப்பு, இவ்வாறு மேற்படி மில் உரிமையாளரால், நிலம், நீர், காற்று மாசு அடைகிறது. இதனால் மேற்படி கிராம மக்களுக்கு மிகுந்த பாதிப்பு ஏற்படுவதால் மில் உரிமையாளர் மீது தக்க நடவடிக்கை எடுப்பதோடு, பொது மக்களுக்கு பாதுகாப்பு கொடுத்து உதவுமாறு வணக்கத்தோடு கேட்டுக்-கொள்கிறோம்.

....3../

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தாங்கள் விரைவில் மேற்படி பிரச்சனைகளை தீர்க்காவிட்டால் மேலே குறிப்பிட்டுள்ள ஊர் பொது மக்களாகிய நாங்கள், உண்ணாவிரத போராட்டம், நீர் பாசன வரி கொடா போராட்டம், சாலை மறியல் போராட்டங்களில் ஈடுபட வேண்டியிருக்கும் என்பதையும் இதன் மூலம் தெரியப்படுத்திக் கொள்கிறோம்.

இங்ஙனம்,

V. [illegible]

இடம்: அரிகலையூர்

நாள்: 10-10-2001

இணைப்பு: 1. முற்றிய குலைக்கே தடுப்பு அணை (1),
2. முற்றிலுமாக உடைந்த குளம் வரை வாய்க்கால் அமைத்துள்ளது (2)
3. வெட்டப்பட்ட பெரிய குளத்தின் போட்டோ. (3).

1,2,3 போட்டோக்கள் இத்துடன் இணைக்கப்பட்டுள்ளது.

நகல்:

1. மாண்புமிகு முதலமைச்சர் அவர்கள், தலைமை செயலகம், சென்னை.
2. மாண்புமிகு நீர் பாசனத்துறை அமைச்சர் அவர்கள், சென்னை.
3. மாண்புமிகு சுகாதார துறை அமைச்சர் அவர்கள், சென்னை.
4. உயர்திரு. சட்டமன்ற உறுப்பினர் அவர்கள், மொரப்பூர்.
5. மாசு கட்டுப்பாட்டு வாரியம், சென்னை.
6. உயர்திரு. மாவட்ட வருவாய் அலுவலர் அவர்கள், தருமபுரி.
7. உயர்திரு. கோட்டாட்சித் தலைவர் அவர்கள், தருமபுரி.
8. உயர்திரு. வட்டாட்சியர் அவர்கள், பாப்பிரெட்டிப்பட்டி.

F. [illegible]

தலைவர்

[illegible]

ஊராட்சி மன்றம்

முக்காரெட்டிப்பட்டி.

பாப்பிரெட்டிப்பட்டி (வட்டம்)

தருமபுரி மாவட்டம்

Exp. Chairman

K-[illegible]

தலைவர்

வெண்டம்பட்டி ஊராட்சி

[illegible]

தலைவர்,

இருளப்பட்டி

ஊராட்சி மன்றம்.

R. [illegible]

துணைத்தலைவர்

[illegible] ஊராட்சி.

K-[illegible]

துணைத்தலைவர்

A. பள்ளிப்பட்டி ஊராட்சி.

[illegible]

தலைவர்

அதிகாரப்பட்டி ஊராட்சி மன்றம்

[illegible]

கவுன்சிலர்

A. பள்ளிப்பட்டி ஊராட்சி.

[illegible]

தலைவர்

பேரூராட்சி மன்றம்

பாப்பிரெட்டிப்பட்டி (P.O)

தருமபுரி மாவட்டம்.

T. [illegible]

ஒன்றிய குழு உறுப்பினர்

அதிகாரப்பட்டி.

Ex-President.

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE AT CHENNAI

Appeal No. 77 OF 2022 (SZ)

M/s. Varalakshmi Starch Industries (P) Ltd.,

...Appellant

AND

Tamil Nadu Pollution Control Board
And others.

...Respondents

INDEX

Sl.No.	Date	Description	Annexures	Pg. No.
1.	09.03.2023	Affidavit	A49	1
2.		Enlarged Site Plan	A50	12
3.	16.03.2023	Proceedings of the 1st Respondent	A51	13
4.	02.03.2023	Appellants Reply to the 1st Respondent	A52	21
5.		Latest Photos of ETP and Green Belt Area	A53	28

Dated at Chennai on this the 1st day of February, 2023.

Counsel for Appellant

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE

AT CHENNAI

Appeal No. 77 OF 2022

M/s. Varalakshmi Starch Industries (P) Ltd.,

Rep. by its Director A. Vinoth Kumar
Having its office at:
"Varalakshmi Tower"
No.127/1, 2nd floor,
Gandhi Road,
Salem- 636 007. ...Appellant

AND

Tamil Nadu Pollution Control Board
Rep. by its Chairperson
76, Anna Salai, Guindy Industrial Estate,
Guindy,
Chennai – 600032 & Ors., ...Respondents

AFFIDAVIT ON BEHALF OF THE APPELLANT

I, A. Vinoth Kumar, Son of V.Anbalagan, Hindu, aged about 36years, having office at "Varalakshmi Tower", 2nd Floor, 127/1 Gandhi Road, Hasthampatty, Salem – 636 007, now temporarily come down to Chennai do hereby solemnly affirm and state as under: -

1. I am one of the Directors of the Appellant herein and as such fully acquainted with the facts and circumstances of the present case. I am filing this affidavit of the Appellant Company.
2. It is submitted that in the above Appeal, this Hon'ble Tribunal on 03.02.2023 ordered as follows:

   " ...2. It appears that the issue can be resolved by complying with the directions issued by the Pollution Control Board. Wherever there is any difficulty, it is for the appellant to meet the Pollution Control Board and take appropriate instructions and file an affidavit stating the compliance

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

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to be complied with particulars and the time frame within which the same could be done. If the said affidavit is filed in compliance of the Pollution Control Board's requirements, the same would be recorded and closed. "

3. It is submitted that pursuant to the order of this Hon'ble Tribunal, the 1st respondent in its proceedings No. TNPCB/T2/F.025102/Directions/Water/2023 dated 16/02/2023 directed the Appellant herein to comply with certain requirements. It is submitted that the Appellant herein on 02.03.2023 submitted a reply to the 1st respondent herein on the directions issued on 16.02.2023.
4. It is submitted that the Appellant herein is submitting this affidavit in compliance/to comply with the directions of the 1st Respondent dated 16.02.2023 in the following manner:

	DIRECTIONS ISSUED	STAGE OF COMPLIANCE/TIME FRAME FOR COMPLIANCE
1.	The unit shall furnish a time bound action plan for completing the ETP revamping works, so as to satisfy the treated effluent standards as prescribed by the Board within a month's time	The appellant has revamped the ETP and enclosed photographs of the same from Pg.Nos.123 to 126 along with the rejoinder to the reply of the respondents dated 31.01.2023. The TNPCB's ROAs (test reports) of the last 3 samples drawn in the months of Aug 2022, Sep 2022 and Jan 2023are "WITHIN THE STANDARDS PRESCRIBED FOR DISCHARGE IN OWN LAND FOR IRRIGATION" which reveals that our ETP is sufficient to satisfy the treated effluent Standards provided under TNPCB guidelines and The Environment

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

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		(Protection) Rules, 1986.
2.	The unit shall furnish a time bound action plan to replace all the Seemai Karuvelam trees in the premises with the native plant species as recommended by the Agriculture Department along with the proposal for safe disposal of entire quantity of treated effluent with adequate green belt area within 15 days.	TNPCB in its consent order dated 29.06.2007 imposed special conditions to discharge the trade effluents - 5,00,100 litres/day from gardening within the premises and for irrigation. Therefore, the appellant had planted Seemaikaruvelam trees in 38 Acres of its own land and the trees are around 15 years old well grown trees numbering around 500 trees per hectare which consumes the entire treated trade effluents being discharged as prescribed by the TNPCB. These trees are being used for completely consuming the treated wastewater discharged within the greenbelt area. These trees are also drought tolerant (required to survive during off-season period when water is not generated) which is a necessity as the Appellant being an agriculture based seasonal Industry does not operate throughout the Year. Further, if these trees are cut at a stretch, then the treated water will not get consumed leading to violation of the consent order. Hence, we may be permitted to remove Seemaikaruvelam trees in a phased manner i.e., 5 acres

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

		per annum by planting native plant species recommended by the Agricultural Department which would withstand dry season/non-operation seasons in the mean time.
3.	The unit shall furnish the layout of the premises marking the green area that are being maintained for utilisation of treated effluent along with the plantation details such as number of plants, name of the plant species, plantation area etc., within 15 days	The layout of our entire premises with Green Belt area being maintained for the utilisation of treated effluent is enclosed herewith. Around 500 Seemaikaruvelam trees per hectare and out of which about 100 trees are with creepers. The total area in which Seemaikaruvelam trees and creepers are about 16 Hectares.
4.	The unit shall cover the storage area of wet Tapioca Thippi by providing a shed within a month's time.	As of now, the Tapioca crushing season has just finished. Wet Thippi stock is in the yard (storage area). It is now being gradually removed for sun drying and the Yard will become empty by June 2023. After that, we will commence and complete the roofing works before the next rainy season; i.e.. within 31/10/2023.
5.	The unit shall conduct Water and Wastewater audit through reputed institution like Anna University,	The project has been assigned to reputed Anna University, Chennai and their fees of Rs.3.18 lakhs has also been paid on 1st October 2022 itself. Initially,

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

	Chennai/IIT Madras and furnish report to the Board. The time bound action plan for the same shall be furnished within a month's time, as the unit has made payments to The Anna University, Chennai to carry out ETP adequacy study only and not for the Water and Wastewater audit as directed by The Board vide proceeding dated 17.10.22.	until the latest board directions dated 16/02/23, we were under the impression that Adequacy report is comprised of Water & Wastewater report. Hence immediately on receipt of The Board Directions dated 16/02/2023, we have discussed with the Anna University and they too have obliged to include audit of Water & Wastewater with the already commenced study. A team consisting of four Technical persons from Anna University Centre for Environmental Studies Department visited our unit on 24/02/2023 and throughout the day conducted a detailed study including equipments and its measurements, mass balance etc., collected samples at all levels of Treatment and have also captured photos and videos, wherever necessary. Continuous work is in progress. Since the work involves Anna University too, we are unable to provide a time bound action plan for the completion of the work.
6.	The unit shall conduct Groundwater quality study through reputed institution like Anna University, Chennai/ IIT Madras in the	Upon receipt of the Board directions dated 16/02/2023, we have requested Anna University to conduct ground water quality study and have vide our email and work order dated 27/02/2023, we

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

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	green belt areas that are being maintained utilizing the treated effluent and furnish the report to The Board within a month's time.	have asked them to provide us their offer. They have agreed to conduct the study and provide us the report on Ground Water quality. Upon receipt of the same, immediately we will furnish it to The Board.
7.	The unit shall provide adequate piezometric (monitoring) wells in the green belt area to monitor the groundwater quality and furnish the report to The TNPCB regularly in view of repeated complaint received. An action plan shall be submitted within a month's time.	As directed by The Board, we will provide the monitoring wells in our Green Belt area, within April 2023.
8.	The unit shall stop discharging treated /untreated trade effluent through the outfall located near ETP area into the Peeniyar canal immediately and shall ensure that there is no access for the treated /untreated trade effluent to nearby water bodies, outside the premises either directly and indirectly. The action	At no point of time, we are letting out our Raw Effluent and Treated effluent into any canal or water bodies. The outfall being pointed out is actually a Storm Water drain. Our Effluent is not a waste product. It is a valuable by-product for producing Bio-gas. It is 100% utilised and we will never release it in any canal or water bodies. During heavy rains, once our Rainwater Harvesting Pond gets completely filled, the excess rain water passes into the Jungle Stream as

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

	taken in this regard shall be reported to The Board within a week's time.	the rain water cannot be allowed to mix with waste water, as per the TNPCB norms.
9.	The unit shall dewater the stagnation of water in the pit provided for the proposed anaerobic reactors immediately and shall maintain the sludge drying beds properly and shall report to The Board within a week's time.	The rainwater stagnated in the pit of the proposed anaerobic reactors during the monsoon period is being continuously dewatered. The 5 nos. of sludge drying beds are also being properly maintained.
10.	The unit shall check the stability of the ETP, by engaging reputed institution like Anna University, Chennai / IIT Madras and furnish the report to the TNPCB within a month's time.	Upon receipt of the Board directions dated 16/02/23, for getting the report on the Stability of our ETP, we have approached the Anna University vide our email and work order dated 27/02/23 and have asked them to provide us their offer. They have agreed to conduct the study and provide us the ETP Stability report Upon receipt of the same, immediately we will furnish it to The Board. Since checking and reporting lies with Anna University, we are unable to confirm the duration.
11.	The unit shall install / maintain Electro Magnetic	Electro Magnetic Flow Meters, one in the Raw Effluent Feeding line and

for Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

	Flow meter with computer recording arrangement at the inlet and outlet of the ETP within a month's time and shall furnish monthly report to The Board.	another one for outlet are already available. Manual recording is being done. Since this being a new direction, Installation works for enabling computer recording is on-going and will be commissioned in about a months' time.
12.	In order to ensure the compliance of the above directions 1 to 11, the unit shall furnish a Bank Guarantee for Rs.50 Lakhs valid for one year to the TNPCB within a month's time (Format enclosed)	The Board insisting the industry for Furnishing Bank Guarantee, is to ensure installation of Pollution control measures within the time schedule, as per the above. Since already, we ourselves have voluntarily invested a huge sum of around Rs.420 lakhs in setting up of Secondary Treatment Plant for ensuring zero defect treatment, which is up to date latest technology, from our own source from capital reserves, as we could not obtain financial assistance from our Bank due to non-holding of valid consent order. The basis for asking us to furnish Bank Guarantee is to ensure that we make timely necessary investments to ensure the treated effluents meet the PCB standards. The Board insists the industries to furnish bank guarantee to ensure that we will install pollution control measures within the time schedule as assured. But in our

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

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		case, when we have already completed the investments, the need for Bank guarantee which is an additional burden on the industry as a tool to pressurize us is not required. ***We are submitting proof for payment of 420 Lakhs towards purchase of Secondary treatment Plant is enclosed herewith.*** Hence, this direction for furnishing Bank Guarantee may be waived.
13.	The unit shall ensure the Compliance of all the above said conditions and furnish the compliance report to The Board so as to examine the issue of renewal of consent to the unit.	We have already revamped our ETP and the same can be ascertained from the PCB Lab ROAs since August 2022 itself. We have never discharged trade effluents into the channel. Moreover the trade effluent is a valuable by-product for production of valuable Biogas. Now we had herewith has enclosed the layout of our entire premises marking the Green Belt area. We will complete construction of Thippi Shed roofing before 31/10/23. We will provide monitoring wells in a months' time. The present Electro Flow Meter readings will be computerised upon completion of the on-going process of Membrane reactors –operations. We will fully co-operate and get the audit

for Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

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		and study reports of 1.Water& Wastewater, 2. Ground Water Quality and 3. ETP Stability done through Anna University at the earliest. We request to waive the Bank Guarantee 'based on the' invested Rs.420 lakhs instead of this Rs.50 lakhs. Thus, we have ensured to comply by all the directions issued by The Board.

5. It is submitted that the Appellant unit which is in operation for the past over 25 years by strictly following the norms of the Pollution Control Board and without any kind of complaints against it. It is submitted that unfortunately when the appellant approached the respondents for renewal of consent, different kinds of directions are being issued from time to time.

6. It is submitted that standards for land irrigation prescribed for Discharge of Trade Effluent (TNPCB guidelines *TNPCB B.P. Ms. No. 30 Dated: 21.02.1984*) and The Environment (Protection) Rules, 1986, for Total Suspended Solid (TSS) is 200 mg/L, max, Biochemical Oxygen Demand (BOD) is 100 mg/L max, Chemical Oxygen Demand (COD) – Nil, Total Dissolved Solids (TDS) – 2100 mg/L, max. Whereas, whileso, the 1st respondent in its Consent Order No. 2005130094389 dated 02/03/2020 prescribed different standards for the appellant viz., Total Suspended Solid (TSS) is 100 mg/L, max, Biochemical Oxygen Demand (BOD) is 30 mg/L max, Chemical Oxygen Demand (COD) – 250. The appellant pray that the Hon'ble Tribunal, to direct the 1st respondent to prescribed standards by following its guidelines dated 21.02.1984 and Environmental (Protection) Rules, 1986 while issuing renewal of consent.

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

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Therefore, it is humbly prayed that this Hon'ble Tribunal may be pleased to record this Affidavit and further direct the respondents to renew the order of consent by following its guidelines dated 21.02.1984 and Environmental (Protection) Rules, 1986 and thus render justice.

For Varalakshmi Starch Industries (P) Ltd

(A. VINOTHKUMAR)
Director

Solemnly affirmed at Chennai
On this the 9th day of March,
2023 and signed his name
In my presence.

BEFORE ME

P.S 7132/10

ADVOCATE, CHENNAI

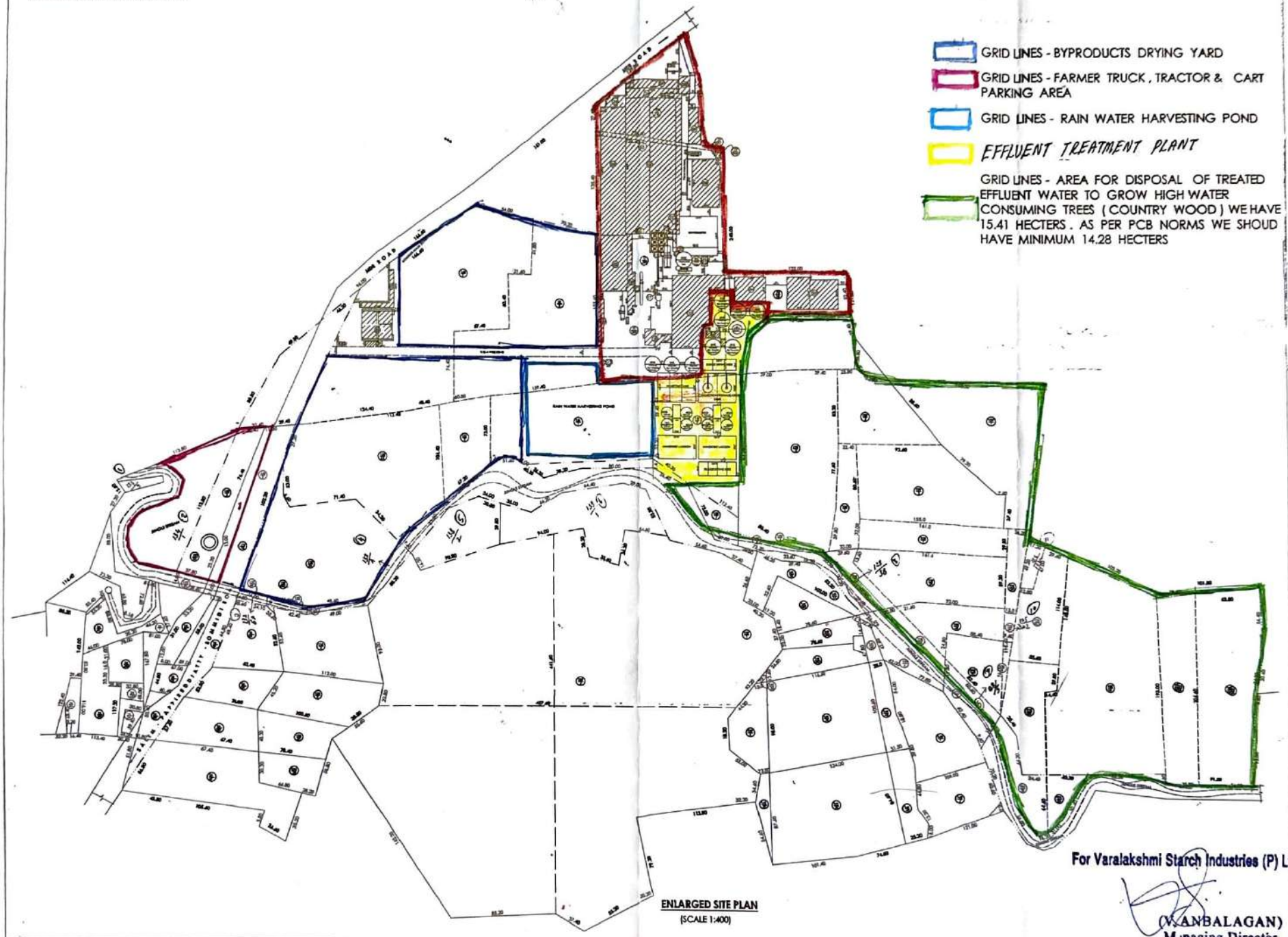
P.S PRADHU
No: 303
NACC
CH 104.

VARALAKSHMI STARCH INDUSTRIES (P) LTD.,
PAPPIREDDIPATTY TALUK,
PAPPIREDDIPATTY VILLAGE & ALAMELUPURAM VILLAGE,
DHARMAPURI DISTRICT.

ORIENTATION
WEST
SOUTH — NORTH
EAST

LEGEND:

- BOUNDARY MARKED - ENTIRE INDUSTRY
- GRID LINES - BYPRODUCTS DRYING YARD
- GRID LINES - FARMER TRUCK , TRACTOR & CART PARKING AREA
- GRID LINES - RAIN WATER HARVESTING POND
- EFFLUENT TREATMENT PLANT
- GRID LINES - AREA FOR DISPOSAL OF TREATED EFFLUENT WATER TO GROW HIGH WATER CONSUMING TREES (COUNTRY WOOD) WE HAVE 15.41 HECTERS . AS PER PCB NORMS WE SHOUD HAVE MINIMUM 14.28 HECTERS



ENLARGED SITE PLAN
(SCALE 1:400)

For Varalakshmi Starch Industries (P) Ltd

(VANBALAGAN)
Managing Director

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By Speed Post

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TAMILNADU POLLUTION CONTROL BOARD

Proceeding No.: TNPCB / T2 / F.025102 / Directions / Water / 2023 , dated: 16.02.2023

Sub. TNPCB – Industries – M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F.No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt,128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District – Directions issued under Section 33A of the Water (P&CP) Act, 1974 as amended – Regarding.

Ref.
1. Proceeding No.: TNPCB / T2 / F.025102 / Directions / Water / 2022 , dated: 17.10.2022
2. Proceeding No.: TNPCB / T2 / F.025102 / DMP / Closure / Water / 2022, dated: 08.11.2022
3. The Hon'ble NGT order dated 09.12.2022 in Appeal No. 77 of 2022.
4. Report of the Board Senior Officials committee, dated 03.01.2022.
5. The Hon'ble NGT order dated 03.02.2023 in Appeal No. 77 of 2022.

****

Whereas, direction has been issued to the unit M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F.No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt,128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District vide proceeding 1st cited to comply with certain conditions stipulated therein. Subsequently, direction for closure and disconnection of power supply was issued to the unit vide proceeding 2nd cited for not complying with any of the direction issued to the unit vide proceeding 1st cited.

Whereas, during the Hon'ble Legislative Assembly Petition Committee meeting held on 09.11.2022, complaint petition no. 6988 received against the unit was reviewed. In this regard based on the Hon'ble Legislative Assembly Petition Committee's direction, the District Collector, Dharmapuri vide proceeding dated 15.11.2022 formed a committee to inspect the unit under the Chairmanship of the District Revenue Officer and 11 other members comprising the officials of the Agriculture Department, Public Works Department, WRO Division and Ground Water Division, Survey department, Fisheries Department, Industry safety and Health, TWAD Board, Food Safety Department, Tamil Nadu Pollution Control Board and Department of Health and Welfare. The Petition Committee headed by the District Revenue Officer inspected the unit on 30.11.2022.

Whereas, the Petition Committee inspection report, dated 23.01.2023 states that, 7 out of 11 Departments inspected the unit confirms the violations in unit's operations.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141
Fax : 044-22353068

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Whereas, the unit filed an Appeal before the Hon'ble National Green Tribunal, Southern Zone, vide Appeal No. 77 of 2022. The Hon'ble NGT vide order 3rd cited issued interim stay for the closure direction issued to the unit and directed the TANGEDCO to restore power supply to the unit immediately. Based on the same, the TANGEDCO has restored power supply to the unit on 12.12.2022.

Whereas, the Board formed a committee on 07.12.2022 comprising senior officials of the TNPCB to inspect the unit to ascertain the factual status of the unit. In this regard, the committee inspected the unit on 27.12.2022 and recommended to issue direction to the unit to comply with certain conditions vide reference 4th cited.

Whereas, the Hon'ble NGT vide order 5th cited stated that the issue can be resolved by complying with the directions issued by the Board. Further, the Hon'ble NGT directed the unit to take appropriate instructions from the Board and file an affidavit stating the compliance, to be complied with particulars and the time frame.

In the light of the above, the unit M/s. Varalakshmi Starch Industries, Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District is issued with the following directions under Section 33A of Water (Prevention and Control of Pollution) Act, 1974.

1. The unit shall furnish a time bound action plan for completing the ETP revamping works, so as to satisfy the treated effluent standards as prescribed by the Board within a month's time.
2. The unit shall furnish a time bound action plan to replace all the Seemai Karuvelam trees in the premises with the native plant species as recommended by the Agriculture Department along with the proposal for safe disposal of entire quantity of treated effluent with adequate green belt area within 15 days.
3. The unit shall furnish the layout of the premises marking the green belt area that are being maintained for utilization of treated effluent along the with plantation details such as number of plants, name of the plant species, plantation area etc., within 15 days.
4. The unit shall cover the storage area of wet Tapioca Thippi by providing a shed within a month's time.
5. The unit shall conduct Water and Wastewater audit through reputed institution like Anna University, Chennai / IIT Madras and furnish report to the Board. The time bound action plan for the same shall be furnished within a month's time, as the unit has made payments to the Anna University, Chennai to carry out ETP adequacy study only and not for the Water and Wastewater audit as directed by the Board vide proceeding dated 17.10.2022.

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TAMILNADU POLLUTION CONTROL BOARD

6. The unit shall conduct ground water quality study through reputed institution like Anna University, Chennai / IIT Madras in the green belt areas that are being maintained utilizing the treated effluent and furnish the report to the Board within a month's time.
7. The unit shall provide adequate piezometric (monitoring) wells in the green belt area to monitor the ground water quality and furnish the report to the TNPCB regularly in view of repeated compliant received. An action plan shall be submitted within a month's time.
8. The unit shall stop discharging treated / untreated trade effluent through the outfall located near ETP area into the Peeniaar canal immediately and shall ensure that there is no access for the treated / untreated trade effluent to nearby water bodies, outside the premises either directly and indirectly. The action taken in this regard shall be reported to the Board within a week's time.
9. The unit shall dewater the stagnation of water in the pit provided for the proposed anaerobic reactors immediately and shall maintain the sludge drying beds properly and shall report to the Board within a week's time.
10. The unit shall check the stability of the ETP, by engaging reputed institution like Anna University, Chennai / IIT Madras and furnish the report to the TNPCB within a month's time.
11. The unit shall install / maintain Electro Magnetic Flow Meter with computer recording arrangement at the inlet and outlet of the ETP within a month's time and shall furnish monthly report to the Board.
12. In order to ensure the compliance of the above directions 1 to 11, the unit shall furnish a Bank Guarantee for Rs. 50 Lakhs valid for one year to the TNPCB within a month's time (Format enclosed).
13. The unit shall ensure the compliance of all the above said conditions and furnish the compliance report to the Board so as to examine the issue of renewal of consent to the unit.

Failing to comply with the above direction, further action will be initiated against the unit on merits in accordance with law without any prior intimation.

The receipt of this proceeding shall be acknowledged.

Enclosure: As above

16/2/23

For Chairperson

10/02/23

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141
Fax : 044-22353068

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To
The Managing Director,
M/s. Varalakshmi Starch Industries Pvt. Ltd.,
Alamelupuram Village, Pappireddipatti Taluk,
Dharmapuri District
Pin: 636 905

Copy To

1. The Joint Chief Environmental Engineer (M),
   Tamil Nadu Pollution Control Board,
   Vellore Zone.

2. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Dharmapuri.

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TO BE TYPED IN Rs.100/- NON JUDICIAL STAMP PAPER

THIS DEED OF GUARANTEE made on the _____ day of _____ Two Thousand Twenty One by _____ of the one part in favour of Tamil Nadu Pollution Control Board (TNPCB) of other part.

WHEREAS M/s._____ running an industry at _____has approached the TNPCB for the purpose of _____ and TNPCB having agreed to consider the request of the industry of M/s. _____ under the terms and conditions put forth in the schedule enclosed hereunder.

AND WHEREAS in accordance with clause _____ of the conditions put forth in the schedule enclosed hereunder the industry M/s. _____ is desirous of furnishing a Bank Guarantee from _____ for the sum of Rs._____ towards security deposit valid for _____ months.

AND WHEREAS at the request of the industry holder the Bank has agreed to give its guarantee as hereinafter contained. Now this deed witnesses as follows:

We (Bank name and address is to be typed here) (Herein after referred to as the Bank) do hereby undertake to pay the Board an amount not exceeding Rs._____ (amount to be typed in figures & words) against any non-fulfillment of the conditions contained in the schedule, wholly or partly by the said industry M/s. (full address of the unit is to be type here) and we, (Bank name and address is to be typed here) do hereby undertake to pay the amount due payable under this guarantee without any demur, merely on demand from the Board stating that the amount claimed is due by non-fulfillment of the conditions in the schedule wholly or partly by the said industry. Any such demand made on the Bank shall be conclusive as regards the amount due payable by the Bank under this guarantee. However our liability under this guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said schedule and that it shall continue to be enforceable till all dues of the Board under the schedule have been fully performed and its claim satisfied or discharged or till the Tamil Nadu Pollution Control Board (Office / Department) certifies that the terms and conditions of the said schedule have been fully and properly carried out by the said industry and accordingly discharges the guarantee. Unless a demand or claim under the guarantee is made on us in writing on or before (date of expiry of bank guarantee to be typed here) we shall be discharged from all liability under this guarantee thereafter.

Board shall have full liberty without our consent and without affecting in any manner our obligation hereunder to every one of the terms and conditions of the said schedule or to the extent the time of performance by the said industry from time to time or to postpone for any time or from time to time any of the powers exercised by the Board against the said industry and forbear and enforce any of the terms and conditions relating to the said schedule and we shall not be relieved of our liability by reason of any such variation, or extension being granted to the said industry or for any forbearance, act or omission on the part of the Board or any indulgence by the Board.

We (Bank name and address is to be typed here) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

(Banker Signature with Seal)

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SCHEDULE TO THE BANK GUARANTEE NO.

M/s. Varalakshmi Starch Industries Pvt. Ltd, S.F.No. 75 pt, 77 pt, 78 pt, 168 pt of Pappireddipatti &121pt, 125pt,128 -132 pt, 138 pt of Alamelupuram Village, Pappireddipatti Taluk, Dharmapuri District

Name of the Industry which applied for the consent of the Board	**Bank guarantee Rupees**	**Terms and conditions**
(full address of the unit is to be typed here)	Rs.50 Lakhs.	1. The unit shall furnish a time bound action plan for completing the ETP revamping works, so as to satisfy the treated effluent standards as prescribed by the Board within a month's time. 2. The unit shall furnish a time bound action plan to replace all the Seemai Karuvelam trees in the premises with the native plant species as recommended by the Agriculture Department along with the proposal for safe disposal of entire quantity of treated effluent with adequate green belt area within 15 days. 3. The unit shall furnish the layout of the premises marking the green belt area that are being maintained for utilization of treated effluent along the with plantation details such as number of plants, name of the plant species, plantation area etc., within 15 days. 4. The unit shall cover the storage area of wet Tapioca Thippi by providing a shed within a month's time. 5. The unit shall conduct Water and Wastewater audit through reputed institution like Anna University, Chennai / IIT Madras and furnish report to the Board. The time bound action plan for the same shall be furnished within a month's time, as the unit has made payments to the Anna University, Chennai to carry out ETP adequacy study only and not for the Water and Wastewater audit as directed by the Board vide proceeding dated 17.10.2022. 6. The unit shall conduct ground water quality study through reputed institution like Anna University, Chennai / IIT Madras in the green belt areas that are being maintained utilizing the treated effluent and furnish the report to the Board within a month's time. 7. The unit shall provide adequate piezometric (monitoring) wells in the green belt area to monitor the ground water quality and furnish the report to the TNPCB regularly in view of repeated compliant received. An action plan shall be

		untreated trade effluent through the outfall located near ETP area into the Peeniaar canal immediately and shall ensure that there is no access for the treated / untreated trade effluent to nearby water bodies, outside the premises either directly and indirectly. The action taken in this regard shall be reported to the Board within a week's time. 9. The unit shall dewater the stagnation of water in the pit provided for the proposed anaerobic reactors immediately and shall maintain the sludge drying beds properly and shall report to the Board within a week's time. 10. The unit shall check the stability of the ETP, by engaging reputed institution like Anna University, Chennai / IIT Madras and furnish the report to the TNPCB within a month's time. 11. The unit shall install / maintain Electro Magnetic Flow Meter with computer recording arrangement at the inlet and outlet of the ETP within a month's time and shall furnish monthly report to the Board. 12. In order to ensure the compliance of the above directions 1 to 11, the unit shall furnish a Bank Guarantee for Rs. 50 Lakhs valid for one year to the TNPCB. (Format enclosed) 13. The unit shall ensure the compliance of all the above said conditions and furnish the compliance report to the Board so as to examine the issue of renewal of consent to the unit.

(Banker Seal with Signature)

(Banker Name and Code Number)

2)

VARALAKSHMI STARCH INDUSTRIES (P) LTD.

An ISO 9001 : 2008, 14001 : 2004, BS OHSAS 18001 : 2007 Certified Company

MRFS. & EXPORTERS : SUPER HIGH GRADE TAPIOCA SAGO, TAPIOCA STARCH, MAIZE STARCH & MODIFIED STARCHES

VSIPL/PCB/2022-23/498/RPAD

02/03/2023

To
The Chairperson
Tamilnadu Pollution Control Board
Chennai

Respected Madam,

Sub: Board Proceedings dated 16/02/23 received through email from The DEE, Dharmapuri– reg.,

Ref:

1. Proceeding No. TNPCB/T2/F.025102/Directions/Water/2023dtd. 16/02/2023 received on 18/02/2023
2. Proceeding No. TNPCB/T2/F.025102/Directions/Water/2022 dtd. 17/10/2022
3. Clarification from The DEE, vide letter No.F.DMP0013/DEE/TNPCB/DMP/OL/2021 dated 22/10/2022
4. Our reply vide No.VSIPL/PCB/2022-23/343/RPAD dated 28/10/2022 for your Proceedings dated 17/10/22 sent by Registered Post and email on 29/10/2022
5. Proceeding No. TNPCB/T2/F.025102/DMP/Closure/Water/2022 dtd. 08/11/2022
6. The Hon'ble NGT order dated 03/02/2023 for our Appeal No.77 of 2022
7. and all the earlier correspondences

With reference to the above, we are in receipt of your Board Proceedings, cited in 1st reference above by email on 18/02/2023 through The DEE (A/C), Dharmapuri and would like to bring to your kind attention the following.

The Directions issued to us vide The Board proceedings dated 16/02/2023, 1st cited in our above reference, is almost the same as that of the directions, issued to us vide the Board proceedings dated 17/10/2022, 2nd cited in our above reference to which we had made our detailed point by point submissions on the slew of directions with evidence of the compliances already completed, the ongoing works for completion of some directions and submitted perfect reasons for some delays in completion of certain directions. It was submitted that in compliance with the directions for improving the performance of the current ETP that was already performing at 99% efficiency we had already voluntarily commenced installation of a Secondary Treatment Plant as an extension to the existing ETP by installing Membrane Bioreactor Plant to ensure zero-defect operation at a Project cost of around Rs.420 Lakhs, the details such as Purchase Orders (Imported & Indigenous), GST invoices, Payment transaction details, Civil construction photos etc evidencing the commencement of works 4 months prior to the proceedings dated 17/10/2022, all of which was shared vide our letter No. VSIPL/ PCB/2022-23/343/RPAD dated 28/10/2022, cited in 3rd reference, sent by

Regd. Office : " Varalakshmi Tower ", II Floor, No. 127/1, Gandhi Road, Salem - 636 007. T.N. India.
Ph. (Off.) : 0427 - 4031073
Email : office@varalakshmistarch.com
Factory : No. 7/114-126, Bommidi Main Road, Pappireddipatti (Po), Dharmapuri Dt. - 636 905.
CIN No. U01532TZ1995PTC006136 www.varalakshmistarch.com

IS : 899 CM/L-6100012769

IS : 1319 CM/L-6299891

Registered Post and email through which, we had also requested the Chairperson to kindly provide us a Personal Hearing before initiating any further action.

If at all the ROAs of treated wastewater samples dated 28/10/2022 for the months of August 2022 and September 2022 stating all the Standards are within the limits and our representation along with all the relevant enclosures, photos evidencing the compliances made (which where all minor improvement measures and not serious violations) to those directions of The Board Proceedings (dated 17/10/2022), made vide our letter No. VSIPL/PCB/2022-23/343/RPAD dated 28/10/2022, cited in 4th reference, sent to The Chairperson and requesting the Chairperson to kindly provide us a Personal Hearing (PH), before taking any further decision. If at all that letter had been considered, we would have been provided with a PH wherein, we could have presented ourselves in person with all the relevant documents and shown the Photos, Videos etc., evidencing our compliances and made you recognise the facts thereby avoiding the issuance of closure order to our factory and the resulting multi-crore losses to us and our farmers supplying our raw materials (Tapioca Tubers and Maize kernels).

Though our letter 4th cited above, along with its all enclosures complying your directions dated 17/10/2022 sent by registered post and email, it has been not taken into consideration. Even in the now received proceedings of the Board dated 16/02/2023 in accordance with The Honourable NGT Order referred 5th above also, the submissions made by us vide our letter (3rd cited) has not taken onto record. Kindly now take that letter onto record. Only if that letter is being taken onto record, an amicable conclusion without damaging the industry and farmers to the issue could be obtained, without any damage to our Factory and our Farmers, to The Government Revenue, Export Business and Foreign Exchange Earnings.

Initially, it all started with TWO directions vide 1st query dated 18/10/2022 and gradually the directions had kept on increasing vide repeated queries and Board Directions. Now, in the latest Board directions dated 16/02/2023, the number of directions demanded to be complied with is 13 nos. With the hope that with this, the issue will get resolved, now, we are submitting our detailed point wise reply to the Board Directions dated 16/02/2023 as below.

1. The Board, vide Consent Order No. 2005130094389 through Proceedings No.F.0022DMP/OL/DEE/TNPCB/DMP/W/2020 dated 02/03/2020, has mandated us to discharge treated trade effluents on only own land for irrigation, but whereas the tolerance limits fixed in the latest Consent Order is for the treated trade effluent to satisfy the Standards meant for discharge in inland surface water bodies. On this, we had raised a detailed clarification citing examples of standards fixed for other similar Sago industries vide letter dated 12.12.2022 to the DEE, Dharmapuri to which a clarification is still awaited. For eg., COD is not supposed to be taken at all when wastewater is discharged in own land for irrigation. Without COD, even then also, majority reports are within the standards and only in one or two samples, with very meagre excess of less than 0.5% only is reported and that too is because of the variance in calculation methods and rounding off as per IS Standards (BIS method of testing).

Asides, The ROAs (test reports) from PCB of the last samples drawn in the months of Aug 2022 and Sep 2022 were already "WITHIN THE STANDARDS" prescribed for surface water body discharge, which reveals the fact that our ETP has improved to well satisfy The Treated Effluent Standards.

Our ETP are perfectly working to satisfy the treated effluent standards.

2. The Seema karuvelam trees in our factory are around 15 years old well grown trees. The whole grown seema karuvelam trees are consuming the entire treated wastewater, being discharged. We have planted this seema karuvelam trees, only in line with following The TNPCB's consent order issued to us in 2007 -as follows:-

> The Board vide 2007 consent order No. DEE/ HSR/2555/W/DMP/2007 dt 29/06/2007, under special conditions, para no.16 has stipulated and stated that *"The industry has to ensure that minimum of three varieties of trees (EUCALYPTUS, SUBABUL AND ANY OTHER SUITABLE VARIETY) are planted at the density not less than 1,000 trees per acre of land. The trees may be planted along the boundaries of the industry or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area and maintain them."*

We have planted this seema karuvelam trees, in line with the TNPCB's third option (any other suitable variety, of the above referred consent order) considering its ability to absorb more treated wastewater and drought resistant, since our Industry being a predominantly seasonally operated in which from April to August there is almost nil production and hence no water discharge. From then onwards, in the last 15 years to till date, the Seema karuvelam trees planted completely consumes the treated wastewater being discharged within our own greenbelt area of an extent of 15.41 hectares. Accordingly, this has been perfectly followed as per the relevant Acts and there is no violation of the Water Act 1974, in discharging treated wastewater which has been confirmed by your good selves (TNPCB) through your counter reply to Honourable NGT in Para No.14.

In our Unit, we have planted Seema Karuvelam trees of around 500 trees per hectare. In addition, creepers are also planted which are not countable.

Now, you are directing us to replace the entire Seema Karuvelam Trees and to plant native species as recommended by The Agriculture department and along with submit our proposal for "Safe disposal of entire quantity of treated effluent" within 15 days.

We would like to state that the new trees whatsoever species, upon immediate plantation, the baby plants would not be able to observe the entire treated wastewater load, in line with the Hydraulic load of 35 kl per hectare (500 Trees) as prescribed by The Board vide consent order. Because it takes a minimum of 5 years of growth for each plant to grow and get strengthened to observe the water load, prescribed by the Board, leading to violation of the Water Act as the 1st important compliance is to get the entire treated water consumed; without allowing to pass to Land/Ground and Public Land.

Hence considering these facts, little by little only, in a phased manner, the fully grown 15 years old Seema Karuvelam trees could be replaced. One more constrain is, now a days availability of labours/

workers for cutting the Trees with full of thorns is very difficult. Otherwise if you insist on us to remove it immediately, then where we would be able to dispose the more than 400 KL per day of treated water. We would not be able to run our Industry for 4-5 years until the new plants grow to that capacity of observing. Not running our Industry for a year, will make us lose our domestic and international customers and kill the industry permanently. So, we will take this condition to The Honourable NGT, in next hearing.

Asides, despite requesting for a copy of The Agriculture Department report earlier to the DEE of Dharmapuri, it has been denied and till date we have not been provided stating it is an internal record. Hence, kindly provide us with a copy of the Agriculture Department recommendations so that we will go through it and let you know the feasibility in planting the same and we will start the plantation without disturbing the current and regular plant operations.

3. We will furnish the layout of the premises marking the Green Belt area being maintained by us for discharging our totally Treated Effluent with extent of planting, as stipulated by the Board within the stipulated time of 15 days.

4. Tapioca Thippi is not a waste but a valuable by-product that arises during the manufacture of Tapioca Starch from Tapioca tubers. In all Sago Industries, Tapioca Thippi is generally sold in wet form to Cattle rearing farmers for use as Cattle feed or sun-dried and sold to Cattle feed manufacturers for use as ingredient in their packaged cattle feed products. Since this Tapioca thippi is sold in wet form or sun dried for sales in dry form, we have not felt the need to provide roofing in the storage shed (also it was not insisted by TNPCB in all these Years) though walls on all sides have been provided. As the period between November to March is the peak Tapioca crushing season as well as the monsoon period, August, September, March, April are lean season. Now is season ending and hence Wet Thippi gotten from the Tubers crushed since November, is in the yard. In the months of May, June & July (Summertime) it will get sun dried and sold off and thus the yard will get emptied. The fabrication work of MS Truss for roof has already started. Civil work is also completed. Only erection of Truss and roof sheet alone is pending. Due to the insistence of TNPCB, we will start laying the Roofing works from April 2023 and complete on or before 31/10/2023, before the commencement of the next Tapioca crushing season.

5. We were under the impression that conducting a study of Adequacy report will result in reporting of Water and Waste Water audit, Ground Water Quality and Stability of ETP. Only upon receipt of the Board Directions dated 16/02/2023, we came to know that both Study of Adequacy report, Water & Waste Water study report and Stability of ETP varies. Hence, upon receipt of the Board Directions dated 16/02/2023, we have sent our requisition again to Anna University vide our email and letter dated 27/02/2023 for conducting an audit of Water and Waste Water, the Ground Water Quality study and Stability of ETP etc and have requested them to send their quote/offer. Once upon receipt of the same from them in a day or two, we will make the due payments and commence the studies and submit the reports to the Board as soon as it is received from the university. (Copy of the email sent, is enclosed herewith for your ready reference)

6. As we have already mentioned in the above paragraph No.5, we have asked The Anna University to also conduct Study of Ground water quality of our green belt area and they will

simultaneously conduct the study for same along with the water and wastewater study and provide their report, for which according to their demands/charges, payments will also be done, upon receiving their demand. Once we obtain Ground Water Level Study report from The Anna University, we will furnish the same to The Board. (mail copy enclosed)

7. We will provide monitoring wells in our Green Belt area, within April 2023.

8. We would like to state that at no point of time trade effluent or even treated effluent reaches the stream as the greenbelt area has been provided with strong bunds to ensure that even during heavy non-stop monsoon rains, no flow reaches the stream from the greenbelt area. Moreover, we have sufficient greenbelt of 15.41 Hectares for disposal of treated effluent and during the various inspections conducted in our Unit and surrounding areas prior to the closure order, we have never been found or alleged to have disposed their effluents either untreated or treated into any water bodies. Even in the Board's counter reply submitted to the Honourable NGT, in Para no. 14 it is mentioned as *"The Unit was inspected by the officials of The DEE, TNPCB on 16/03/2022 and during inspection, it was observed that there was no flow of water in river Peeniyaru. Also, the Trade Effluent generated from the unit's activity was treated in the effluent treatment plant and the treated effluent was utilised for the development of Seemaikaruvelam trees. There is no direct discharge of Trade Effluent into the river" (Copy of the Page with para14, of The PCB Counter reply is enclosed)*

But nevertheless, we have further strengthened measures to ensure that there will be no flow of either treated or untreated effluent outside the Unit's premises.

9. The rainwater stagnated in the pit of the proposed anaerobic reactors during the monsoon period is being continuously dewatered. The 5 nos. of sludge drying beds are also being properly maintained.

10. Stability of ETP Study report - Subsequent to the already issued Work order to Anna University, we have placed our request vide of email and letter dated 27/02/2023, asked them to study and provide a Stability study of the ETP too. Upon receipt of their report, we will submit the same to the Board. (mail copy enclosed)

11. Electro Magnetic Flow Meters are already available and manual recording is being done. Installation works for enabling computer recording is ongoing and will be commissioned in about a months' time.

12. Bank Guarantee of Rs.50.00 lakhs - We had already completed the investment of Rs.420 lakhs for setting up the Secondary Treatment Plant consisting of Membrane Bioreactor (MBR) and have already incurred expenditures of about Rs.420 lakhs and the expenditure details with bills have been earlier submitted to TNPCB vide our letter dated 21/11/2022 and your officials have also taken photos & videos and inspected the records pertaining to the investment and confirmed the investments made. We have made such no-profit making investment of Rs.420 lakhs, as capital investment for Secondary Treatment MBR Plant for strictly adhering to the TNPCB Consent Order Conditions and Acts. This expenditure for all these is borne out of the funds arranged by the

Company without financial assistance from Scheduled Banks as Banks are not forthcoming to provide financial assistance or Bank guarantees or any form of assistance to industries without valid consent orders from TNPCB.

We ourselves have already voluntarily made Rs.420 lakhs investment towards our new Secondary Treatment Plant, which is 8 times of the Bank Guarantee of Rs.0.50 Crore, being demanded from the Board, for revamping our ETP. Hence, we request you to kindly waive of the Bank Guarantee clause that was requested from us without being aware of the investments that we have already made as it will be a huge additional burden in addition to Rs.420 lakhs and end up in additional financial crux and burden for running the industry due to loss of working capital. The basis for asking us to furnish Bank Guarantee is to ensure that we make timely necessary investments to ensure the treated effluents meets the PCB standards. The Board insists the industries to furnish bank guarantee to ensure that we will install pollution control measures within the time schedule as assured. But in our case, when we have already completed the investments, the need for Bank guarantee which is an additional burden on the industry as a tool to pressurize us is not required and therefore request you to kindly waive off this condition based on our above submissions.

All the above directions are given as for more improvement measures of our Unit. These suggestions are being given to better The Management and Hygiene conditions of the plant only and not on any violation of the any act. Most of these conditions are already complied with, and the rest smaller things too will get complied within a short span of duration.

Post issuance of the closure order dated 08/11/2022, total power supply was abruptly disconnected when the unit was in operation and consequently our ETP operation was also abruptly stopped disturbing the biologically treatment and loss of Bacteria in our ETP. After, Interim Stay was granted by this Hon'ble Tribunal, the Power was reconnected to the Unit on 12/12/2022. As the Effluent Treatment Plant in our unit is completely a Biological process comprising of Anaerobic Digesters and Lagoons (a process through which bacteria break down organic matter in the trade effluent in the absence of oxygen to produce Biogas) and Aeration (a process of adding air into wastewater to allow aerobic biodegradation of the organic materials using activated sludge process), both of which requires for growth and multiplication of bacteria to treat the trade effluent. As the Unit was put back into operation after 35 days due to the Closure order of TNPCB, the old stagnant treated effluent in the ETP were removed and fresh trade effluent from the production unit which acts as a food to Anaerobic and Aerobic bacteria were gradually fed, filled up and treated in the ETP taking number of days for the ETP to startup and reach stability. As such during the inspection of the committee of TNPCB on 27/12/2022, the plant was in operation only for the then past 13 days and the Effluent was being progressively treated in each process of the ETP and had not reached its final disposal point which has been observed and reported by the Committee. Now our ETP has completely stabilized, so we request you to now make an inspection of the ETP.

Taking the above on record and by going through the ROAs of August 2022, September 2022 in which it is stated as "Well within Standards of all parameters", we request the Board to kindly issue us the Consent Renewal Orders, as all these directions are already complied by us. Last two months test reports (ROAs) are confirming the standards as per TNPCB.

Now, we are in a position to apply for the subsequent renewals too as we are supposed to apply for renewals of Consent Orders ONE MONTH prior to the validity. We are ready to pay and apply for the subsequent renewals of The Consent Orders for further 10 years.

Please give a Personal hearing before taking any decision against our factory in this regard and give us the Date of PH before the next NGT hearing date.

Kindly acknowledge receipt of this letter.
Thanking you

Yours Faithfully,
For VARALAKSHMI STARCH INDUSTRIES (P) LTD.,

(A.Vinothkumar)
Director

Enclosures:

1. Copy of the Letter sent to Anna University by mail and RPAD on 27/02/2023
2. Copy of Para no.14 of The TNPCB Counter Reply to The Honourable NGT

Copy To : 1) The Member Secretary, TNPCB, Chennai
2) The JCEE (Ms.Sarasavani), TNPCB, Chennai
3) The DEE, TNPCB, Dharmapuri

Effluent Treatment Plant (As per TNPCB Consent Order)

28

ETP – HUSMAR Anaerobic Digesters- 6 Nos.with Biogas Holder

ETP – Aeration Systems - Diffuser – 4 Nos.

ETP – Surface Aeration – 4 Nos.

30

ETP – Clarifier for Sludge Remover (Separator)

ETP – Sludge Drying Beds

ETP – Anaerobic Lagoons – 2 Nos.

Even in the partial process, the waste water contains organic waste, cows are able to drink the water

32

Being a green belt area, cows are grazing. Due to perfect treatment grasses are grown well and cows desires to eat. If not treated properly then the grasses get dry up.

THIS IS THIPPI YARD. WET THIPPI WILL BE DRIED IN ANOTHER TWO MONTHS. BEFORE THAT ERECTION OF ROOF TRUS & ROOF SHEET IS NOT POSSIBLE. SO, BEFORE THE FORTHCOMING RAINY SEASON, ROOF WORK WILL BE COMPLETED

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE AT CHENNAI

Appeal No. 77 of 2022 (SZ)

M/s. Varalakshmi Starch Industries (P) Ltd.,
Rep. by itsDirectorA.Vinoth Kumar
Having its office at:
"Varalakshmi Tower"
No.127/1, 2nd floor,
Gandhi Road,
Salem- 636 007. ...Appellant

AND

Tamil Nadu Pollution Control Board
Rep. by its Chairperson
76, Anna Salai, Guindy Industrial Estate,
Guindy,
Chennai – 600032.
And 3 others. ...Respondents

AFFIDAVIT ALONG WITH ANNEXURES

M/s. K.INDU PRIYA (E.No.1385/13)
K.R.NISHANTH (E.No.708/14)
S.SATCHITHANANTHAM(E.No.7267/21)
Counsel for Appellant
98658 23864

BEFORE THE NATIONAL GREEN TRIBUNAL (SZ) CHENNAI

OA No.47 of 2023

Suresh

… Applicant

Versus

1. TNPCB & 5 Ors

… Respondents

VOLUME – A

Counsel for the Applicant

Yogeshwaran. A